



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

y 4.c 73/8:106-35

THE CONSUMER AND INVESTOR ACCESS TO INFORMATION ACT OF 1999

HEARING BEFORE THE SUBCOMMITTEE ON FINANCE AND HAZARDOUS MATERIALS OF THE COMMITTEE ON COMMERCE HOUSE OF REPRESENTATIVES

STANFORD
LIBRARIES

P45-2

ONE HUNDRED SIXTH CONGRESS

FIRST SESSION

ON

H.R. 1858

JUNE 30, 1999

Serial No. 106-35

Printed for the use of the Committee on Commerce



U.S. GOVERNMENT PRINTING OFFICE

58-309CC

WASHINGTON : 1999

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, DC 20402
ISBN 0-16-058778-6

DEPOSITORY

AUG 24 1999

Stanford University
Jonsson Library

COMMITTEE ON COMMERCE

TOM BLILEY, Virginia, *Chairman*

W.J. "BILLY" TAUZIN, Louisiana

MICHAEL G. OXLEY, Ohio

MICHAEL BILIRAKIS, Florida

JOE BARTON, Texas

JOHN D. DINGELL, Michigan

CLIFF STEARNS, Florida

PAUL E. GILLMOR, Ohio

Vice Chairman

JAMES C. GREENWOOD, Pennsylvania

CHRISTOPHER COX, California

NATHAN DEAL, Georgia

STEVE LARGENT, Oklahoma

RICHARD BURR, North Carolina

BRIAN P. BILBRAY, California

ED WHITFIELD, Kentucky

GREG GANSKE, Iowa

CHARLIE NORWOOD, Georgia

TOM A. COBURN, Oklahoma

RICK LAZIO, New York

BARBARA CUBIN, Wyoming

JAMES E. ROGAN, California

JOHN SHIMKUS, Illinois

HEATHER WILSON, New Mexico

JOHN B. SHADEGG, Arizona

CHARLES W. "CHIP" PICKERING,

Mississippi

VITO FOSSELLA, New York

ROY BLUNT, Missouri

ED BRYANT, Tennessee

ROBERT L. EHRLICH, Jr., Maryland

JAMES E. DERDERIAN, *Chief of Staff*

JAMES D. BARNETTE, *General Counsel*

REID P.F. STUNTZ, *Minority Staff Director and Chief Counsel*

JOHN D. DINGELL, Michigan

HENRY A. WAXMAN, California

EDWARD J. MARKEY, Massachusetts

RALPH M. HALL, Texas

RICK BOUCHER, Virginia

EDOLPHUS TOWNS, New York

FRANK PALLONE, Jr., New Jersey

SHERROD BROWN, Ohio

BART GORDON, Tennessee

PETER DEUTSCH, Florida

BOBBY L. RUSH, Illinois

ANNA G. ESHOO, California

RON KLINK, Pennsylvania

BART STUPAK, Michigan

ELIOT L. ENGEL, New York

THOMAS C. SAWYER, Ohio

ALBERT R. WYNN, Maryland

GENE GREEN, Texas

KAREN MCCARTHY, Missouri

TED STRICKLAND, Ohio

DIANA DEGETTE, Colorado

THOMAS M. BARRETT, Wisconsin

BILL LUTHER, Minnesota

LOIS CAPPS, California

SUBCOMMITTEE ON FINANCE AND HAZARDOUS MATERIALS

MICHAEL G. OXLEY, Ohio, *Chairman*

W.J. "BILLY" TAUZIN, Louisiana

Vice Chairman

PAUL E. GILLMOR, Ohio

JAMES C. GREENWOOD, Pennsylvania

CHRISTOPHER COX, California

STEVE LARGENT, Oklahoma

BRIAN P. BILBRAY, California

GREG GANSKE, Iowa

RICK LAZIO, New York

JOHN SHIMKUS, Illinois

HEATHER WILSON, New Mexico

JOHN B. SHADEGG, Arizona

VITO FOSSELLA, New York

ROY BLUNT, Missouri

ROBERT L. EHRLICH, Jr., Maryland

TOM BLILEY, Virginia,

(*Ex Officio*)

EDOLPHUS TOWNS, New York

PETER DEUTSCH, Florida

BART STUPAK, Michigan

ELIOT L. ENGEL, New York

DIANA DEGETTE, Colorado

THOMAS M. BARRETT, Wisconsin

BILL LUTHER, Minnesota

LOIS CAPPS, California

EDWARD J. MARKEY, Massachusetts

RALPH M. HALL, Texas

FRANK PALLONE, Jr., New Jersey

BOBBY L. RUSH, Illinois

JOHN D. DINGELL, Michigan,

(*Ex Officio*)

CONTENTS

	Page
Testimony of:	
Bell, Stuart, Bloomberg Financial Markets	28
Bernard, Richard P., Executive Vice President and General Counsel, New York Stock Exchange	39
Dwyer, Carrie, Executive Vice President, Corporate Oversight, Charles Schwab and Company	48
Furbush, S. Dean, Senior Vice President and Chief Economist, National Association of Securities Dealers	32
Hogan, Michael J., Senior Vice President and General Counsel, DLJdirect	16
Nazareth, Annette L., Director, Division of Market Regulation, Securities and Exchange Commission	6
Ricketts, J. Joe, Chairman and Co-CEO, Ameritrade Holding Corpora- tion	20

(iii)

THE CONSUMER AND INVESTOR ACCESS TO INFORMATION ACT OF 1999

WEDNESDAY, JUNE 30, 1999

HOUSE OF REPRESENTATIVES,
COMMITTEE ON COMMERCE,
SUBCOMMITTEE ON FINANCE AND HAZARDOUS MATERIALS,
Washington, DC.

The subcommittee met, pursuant to notice, at 10 a.m., in room 2322, Rayburn House Office Building, Hon. Michael G. Oxley (chairman) presiding.

Members present: Representatives Oxley, Bilbray, Shimkus, Fossella, Towns, Engle, DeGette, Barrett, Luther, Capps, and Markey.

Staff present: Linda Dallas Rich, majority counsel; Brian McCullough, professional staff member; Bruce Gwinn, minority professional staff member; and Consuela Washington, minority counsel.

Mr. OXLEY. The subcommittee will come to order. The Chair recognizes himself for an opening statement.

People love to talk about the dramatic ways in which the Internet has transformed the world. It is certainly no exaggeration that the Internet has led to the most significant changes in our securities markets, not only since the invention of the ticker tape, but indeed since their creation.

As one of our witnesses here today observes, each day one of every three trades is executed online. Millions of Americans invest online today and the 4- and 5-year-old kids today, who astonish their parents, not only with their VCR programming ability, but also with a computer and keyboard who will be the online investors of tomorrow.

Online investing has empowered investors and given them greater personal control of their finances. Only a few years ago, information that investors could get today at the click of a mouse was available only to professionals like brokers and institutions. As a result of not only online brokerages, but also the development of numerous online sites that provide financial information to consumers, average investors have ready access to investors that is vital to their financial well being.

H.R. 1858 is designed to preserve that access. The central component of the information that investors need is the price of what they are buying or selling, namely stock prices. In the 105th Congress, this subcommittee held a hearing to learn more about the implications of the growth of online investing. One of the issues that arose from that hearing was who owns real-time stock prices.

Real-time stock prices are, as one astute commentator who testified before this subcommittee last year noted, like oxygen to investors. Without access to this information, investors have no ability to make rational economic decisions about whether to buy or sell a security.

Concerns have been raised that investors could be denied access to this information if Congress or a court were to say that this information belongs to the stock exchanges or some other entity. After all, stock prices are facts just like any facts. As an op-ed writer at the Washington Post asked today, should the major league baseball association own the fact that Ted Williams batted .406 in 1941? With no objection, I would like to insert this article into the record.

[The information referred to follows:]

[Wednesday, June 30, 1999—Washington Post]

PUTTING A METER ON THE FLOW OF INFORMATION

by David Ignatius

Here's a business puzzler for you: Who owns the stock quotations? Are they the property of the stock exchanges that administer the market, or the individual traders who "create" it by buying and selling stocks?

That turns out to be a hot issue these days, thanks to our peripatetic friend the Internet. As data swirl around the new Information Economy, the ability to establish property rights—and charge a fee every time someone accesses a particular piece of data—has become a big business.

It's like staking claims in a gold rush, this matter of defining ownership rights in cyberspace. The smallest changes in boundaries can end up costing hundreds of millions of dollars. So, inevitably, different lobbying groups are taking their claims to Congress and battling over precisely where the property lines should be drawn.

Take the matter of stock quotes. The New York Stock Exchange has been charging users a penny every time they access a "real-time" stock quote. They recently announced a plan to cut those fees to 0.75 cents, but for big brokerage concerns, it still adds up to a lot of money. The discount broker Charles Schwab, for example, says it paid the NYSE nearly \$20 million last year. Overall, the Securities Industry Association reports that the NYSE, Nasdaq and other exchanges took in \$413.7 million from sale of market data in 1998, up from \$358 million the previous year.

The NYSE says it doesn't want any new property right but simply a congressional endorsement of its longstanding practice of selling stock quotations. Its executives argue that the quotes exist only because of the market-making power of the exchange, and that they should be free to sell that product.

"The trading floor is a factory floor, and we're in the business of manufacturing prices," says Robert G. Britz, an executive vice president of the NYSE. Putting it another way, he says, "The brokerage firms send us wheat and we turn it into bread." Nonsense, argue Schwab and other brokers that must pay for the information. They contend that the market information belongs to everyone. They don't object to paying a modest user fee. But they insist that stock quotes are facts, like car accidents or the weather, which anyone should be free to report instantly—without having to pay a fee.

What worries some big financial-data firms, such as Bloomberg, is that the NYSE and Nasdaq might someday try to assert ownership, not simply of real-time quotes but of the historic database of past transactions. In that event, Bloomberg might have to pay a fee whenever it summarized the price history of a particular stock. (An NYSE spokesman says the exchange has no plans to do anything like that.)

A House Commerce subcommittee is scheduled to hold a hearing today, debating the merits of the issue. One committee chairman, Virginia Republican Tom Bliley, is backing a measure that would protect the stock exchanges from hackers and pirates—but wouldn't let them stake any ownership claim over the information in their databases. An alternative bill, sponsored by North Carolina Republican Howard Coble, would give the stock exchanges and other concerns more control over databases.

The stock market quotes are just one example of the "intellectual property" issues that arise in the new Information Economy.

Take sports scores. Several years ago, the National Basketball Association claimed, in effect, that it owned the scores to basketball games while they were being played. The NBA sued Motorola, which was transmitting the scores in real time over its pager network. But a federal appeals court sided with Motorola two years ago, arguing that the NBA had no proprietary right to the scores.

Or consider historical sports data, of the kind beloved by fans. Should Major League Baseball be able to assert a property right to the fact that Ted Williams batted .406 in 1941? Some analysts think the Coble bill would give data collectors the power to protect a compilation of batting averages—or an index of poisons, for that matter. Bliley's bill, in contrast, would require a data-base company to add more creativity to its package—allowing a user, say, to compare Williams with other left-handed hitters in the American League—before getting protection.

The danger is that in cyber-space—where information can be copied and re-transmitted instantly—no one will own anything. Everything will be free for the picking.

Congress will be struggling over the next few months to find a balance between simple facts, which should belong to everyone, and creative compilations of those facts—which should belong to the people who do the work. Intellectual property protection is important—it's the incentive that encourages writers to turn simple words into books, and musicians to turn random notes into songs. But finding the right balance won't be easy.

The intellectual property debate now gathering strength in Congress is the kind of complicated issue that only a lawyer could love. But the rest of us, who have a big stake in the outcome, should start paying attention.

Mr. OXLEY. Similarly, should a stock exchange own the fact that an investor has just sold a stock at \$25.2? That's after decimalization, of course. I don't think that we should raise barriers to the free flow of information to the public by creating ownership over facts and information, including stock prices that are contained in databases. H.R. 1858 does not do that.

At the same time the exchanges and others that are required by the Federal securities laws to provide this information to the public should be protected from hackers and pirates who would undermine the integrity and value of the databases they publish. H.R. 1858 strikes the right balance between preserving investor access to market information and protecting the exchanges and others that disseminate that information.

It provides a new Federal remedy for exchanges and other disseminators of market data to stop misappropriation of the databases they publish. And it preserves all of the remedies that currently exist under contract law so the exchanges and market participants remain free to structure their business relations as they deem most mutually beneficial, subject to the oversight of the Securities and Exchange Commission.

This legislation provides an important tool to protect not only the quality and timeliness of market information, but also the access by investors everywhere to that information. I commend the Full Committee Chairman, Tom Bliley, for his leadership in introducing this bipartisan legislation. I also thank my colleagues on both sides of the aisle, including ranking member Dingell, my friend and ranking of the subcommittee, Ed Towns, and vice chairman of the subcommittee Billy Tauzin, Roy Blunt, and Ed Markey for their contribution and cosponsorship of this bill.

I am pleased that this legislation enjoys the support of the SEC, as well as Consumers Union whose letter of endorsement of H.R. 1858 sent yesterday to me and Chairman Bliley—I would like to include it in the record and without objection it will be included as

part of the record—as well as numerous electronic brokerages and financial information services and Internet companies.

[The information referred to follows:]

CONSUMERS UNION
June 28, 1999

Honorable THOMAS BLILEY
Chairman, Committee on Commerce
U.S. House of Representatives
Washington DC 20515

Honorable MICHAEL G. OXLEY
Chairman, Subcommittee on Finance and Hazardous Materials
Committee on Commerce
U.S. House of Representatives
Washington DC 20515

DEAR CHAIRMEN BLILEY AND OXLEY: Consumers Union, the nonprofit publisher of *Consumer Reports* magazine, wishes to state its support for H.R. 1858, the Consumer and Investor Access to Information Act of 1999, which is the subject of Commerce Committee hearings this week. Consumers Union also wishes to state its opposition to H.R. 354, the Collections of Information Antipiracy Act, which has been acted upon favorably by the Committee on the Judiciary.

Consumers Union is both an owner of proprietary databases and a users of databases. It believes that any new protections for data bases must carefully balance the right of database owners not to have their work misappropriated by potential competitor data bases against the right of the public, researchers and others to have ready access to data that are in the public domain, as well as "fair use" rights regarding proprietary data. H.R. 1858 achieves this balance. H.R. 354 does not.

H.R. 1858 would prevent unfair competition; H.R. 354 would facilitate non-competitive pricing for access to facts that belong to the public. H.R. 1858 would preserve the fair use of information; H.R. 354 would not. Specifically applied to stock price quotations, H.R. 1858 would protect the interests of small investors; H.R. 354 would not.

Therefore, Consumers Union urges the Committee to act favorably on H.R. 1858 and the House to pass this bill, rather than H.R. 354.

Sincerely,

MARK SILBERGELD
Co-Director, Washington Office

Mr. OXLEY. We are fortunate to have several of these esteemed supporters of the legislation here before us today. I would like to welcome Ms. Annette Nazareth, the Director of the SEC's Division of Market Regulation who will be our first witness. I would also welcome and thank our second panel of witnesses, including representatives from *DLJdirect*, Ameritrade, Bloomberg, Charles Schwab and Company, the National Association of Securities Dealers, and the New York Stock Exchange for joining us today as the subcommittee considers the Consumer Investor Access to Information Act of 1999.

That ends the opening statement of the Chair. I now recognize the gentleman from New York, Mr. Towns, for an opening statement.

Mr. TOWNS. Thank you very much, Mr. Chairman. Let me say for probably the only time I ever do this, I would like to associate myself with your remarks.

Mr. OXLEY. Thank you.

Mr. TOWNS. Today the subcommittee will consider a fascinating issue, market data and its protection from piracy. The markets of vast collections of transactions, the market data is the juice that makes the market tick. My home State in New York is the world capital of finance and home to the New York Stock Exchange, the

world's biggest stock market and biggest producer of market data. It is important that data be protected from theft by third parties.

Today we will hear testimony on how we can accomplish that important goal. We have a number of important witnesses today representing new electronic brokers, the exchanges and regulators. I am interested to hear the testimony because of my great concern that all investors get easy and fair access to market data.

I would like to commend you, Mr. Chairman, for holding this hearing at this busy time of year. I know what your schedule is like these days because I know of some things that are happening here like H.R. 10. I have heard about that. I would like to welcome all of our witnesses and to say that I am anxious to hear from them. On that note, Mr. Chairman, I am going to yield back.

Mr. OXLEY. I thank the gentleman. Does the gentleman from New York have an opening statement?

The gentlelady from California?

Mrs. CAPPS. I just want to associate myself also with your remarks and I am pleased to be part of this hearing.

Mr. OXLEY. Thank you. It's good to have you with us.

[Additional statements submitted for the record follow:]

PREPARED STATEMENT OF HON. JOHN SHADEGG, A REPRESENTATIVE IN CONGRESS
FROM THE STATE OF ARIZONA

Thank you Mr. Chairman. I commend Chairman Bliley and Chairman Oxley for their leadership on this issue and for conducting this hearing today. I am a strong supporter of H.R. 1858, the Consumer and Investor Access to Information Act of 1999, and believe this legislation provides necessary protections to America's stock exchanges without compromising access to stock quotes needed to facilitate trading. Providing open access to stock information is a longstanding practice within America's equity markets and a cornerstone of a free market society.

H.R. 1858 offers certain protections to stock exchange databases without providing ownership rights. This, I believe, is an important distinction that will prevent future instances of fraud or misuse of stock exchange databases while continuing to provide consumers the access to stock trading information they currently enjoy.

The provision of H.R. 1858 which grants stock exchanges a limited right of action against unauthorized use or misuse of database information is an appropriate method for combating fraud of exchange databases and an improvement to current securities law. Most importantly, this change does not impose any substantial regulatory burden on the exchanges or the brokerage firms.

While the protections offered in Title II of H.R. 1858 are helpful for preventing misuse of exchange databases, the bill includes several limitations to preempt any potential overburdensome regulations imposed on investors and brokerage firms who depend on this information. Specifically, these limitations only allow for a right of action for non-contractual use of database information. If a current contract exists between an exchange and a brokerage firm or television network, a right of action provided by this bill cannot be used to dispute the contract.

Furthermore, the bill applies only to real-time stock quotes and not delayed quotes which are typically used for analytical research of the various stock exchanges. Finally, H.R. 1858 places a priority to federal law regarding ownership of stock exchange databases so that a state law may not be used to circumvent limitations placed on ownership under this legislation.

Again, Mr. Chairman, I wholeheartedly support the provisions included in Title II of H.R. 1858. This legislation strikes a necessary balance between combating fraud and misuse of exchange database information and continuing the tradition of providing accurate real-time stock quotes to investors which is arguably one of the greatest factors contributing to the success of America's stock exchanges and the strength of our nation's economy.

PREPARED STATEMENT OF HON. TOM BLILEY, CHAIRMAN, COMMITTEE ON COMMERCE

Mr. Chairman, thank you for holding this hearing on H.R. 1858, the Consumer and Investor Access to Information Act of 1999, specifically to address the issues in Title II of the legislation.

The securities markets have been one of the biggest beneficiaries from electronic commerce. Title II of the legislation addresses the important role of databases as they relate to the stock markets and the real time market information that is the fundamental information that investors need.

More and more investors have adopted a self-directed approach to investing, doing so through online brokers. The ease of access to information, as well as the quality and quantity of that information, has allowed them to become better educated investors. The efficiencies of technology have flowed down to the average investor with tangible benefits, as evidenced by the low cost of trading commissions today. But the most notable benefit is the access to real time market information that was previously only available to market professionals. It is hard to determine if this is a cause and effect relationship, but the availability of real time market information has coincided with the greatest bull market of our time.

H.R. 1858 protects the conduits of this vital information—namely the exchanges and other disseminators of stock prices—by providing a new federal remedy against pirates and hackers who undermine the integrity and value of the databases they publish.

Importantly, this legislation does not give anybody new property rights over facts and information. It preserves public access to facts and information, like stock prices. Access by the public to this information is essential to ensuring American investors have the tools they need to manage their finances.

I look forward to hearing the comments of our witnesses today, and commend Subcommittee Chairman Oxley for holding this hearing. I also thank my cosponsors on H.R. 1858, including Chairman Oxley, Ranking Member Dingell, Subcommittee Ranking Member Towns, Mr. Markey, and others from both sides of the aisle.

Mr. OXLEY. We now turn to our first witness, the aforementioned Annette Nazareth, the director of the Division of Market Regulation of the SEC. Welcome, Ms. Nazareth, and thank you for appearing as our lead witness.

STATEMENT OF ANNETTE L. NAZARETH, DIRECTOR, DIVISION OF MARKET REGULATION, SECURITIES AND EXCHANGE COMMISSION

Ms. NAZARETH. Thank you. Chairman Oxley, Congressman Towns and members of the subcommittee, I am pleased today to testify on behalf of the Securities and Exchange Commission concerning H.R. 1858, the Consumer and Investor Access to Information Act of 1999. This testimony will focus specifically on title II of the bill which relates to securities market information.

In many important respects, a market can be defined most simply as the exchange of information about the buying and selling interest in a product. In particular, quotations as to the price and size at which buyers and sellers are willing to trade, the interaction of individual buy and sell interests, and the price and volume of transactions that are taking place.

A market's quality depends on the extent to which this information is timely, comprehensive and reliable. In the U.S. securities markets, on an average trading day in 1998, reports of more than 12 million transactions and quotations were disseminated on a real-time basis.

This real-time stream of information is then taken by vendors and broker-dealers and distributed through a myriad of different delivery devices to the millions of retail investors, institutions, securities firms, traders, derivatives markets, and other participants in the U.S. securities markets. The end result is that, regardless

of where investors may be geographically, they are in the midst of the exchange of information concerning buying and selling interest and therefore are part of the market itself.

The worldwide exchange of consolidated real-time information concerning transactions and quotations on the U.S. securities markets must be considered one of the great regulatory and technological achievements of our era as well as one of our national resources. It is this resource that H.R. 1858 is designed to protect.

The bill would prohibit the misappropriation of real-time market information and would provide new remedies against those who violate this prohibition. The bill also is carefully crafted to address the new problem of information theft from high technology systems without disturbing the regulatory and contractual regimes that are responsible for producing the benefits that we already have.

The Commission therefore supports the bill as a balanced and reasonable legislative approach to continue the widespread availability of real-time market information. The need for H.R. 1858 cannot be fully appreciated without pausing to consider the extent to which consolidated real-time market information did not just happen by chance. Rather, it was the result over the last 30 years of planning and concerted effort by the Congress, the Commission, the self-regulatory organizations, and securities industry as a whole.

Moreover, these plans and efforts were brought to fruition only though an enormous investment of capital by the self-regulatory organizations and the industry. The benefits of this information stream are as important as they are familiar. Consolidated market information increases transparency, addresses fragmentation and facilitates the best execution of customer orders. The success of the U.S. securities markets in providing efficient sources of capital is due in no small part to the quality and timeliness of market information.

Of course, success in the past does not ensure continued success in the future. The nonstop change associated with innovative technology can produce problems as well as benefits. Recently, some aspects of the current system for collecting and disseminating market data have been questioned. In particular, the rising number of on-line investors has focused attention on their need for information that is easily available on terms that are fair, reasonable, and non-discriminatory.

To address this and other developing issues, the Commission has undertaken a review of the structures for obtaining market data and the role of data revenues in the operation of the markets. As part of this review, the Commission intends to issue a release describing the existing market data fees and revenues as well as their relationship to the funding of the self-regulatory organizations.

While we have gathered a significant amount of data on these subjects, we are just in the preliminary stages of our analyses. Unfortunately, without the benefit of completing this review, we are unable to make judgments on specific issues on data collection and distribution costs or any suggested structural improvements. Nevertheless, it is clear that the extensive system for collecting and disseminating real-time market information must be protected

from those who would pirate the information without contributing to the costs of supporting the system. It is, therefore, important to protect real-time market information against misappropriation and outright theft.

The Commission supports title II of H.R. 1858 as a reasonable means to help achieve this objective.

That concludes my testimony. Thank you.

[The prepared statement of Annette L. Nazareth follows:]

PREPARED STATEMENT OF ANNETTE L. NAZARETH, DIRECTOR, DIVISION OF MARKET
REGULATION, SECURITIES AND EXCHANGE COMMISSION

Chairman Oxley, Congressman Towns, and Members of the Subcommittee: I am pleased to testify on behalf of the Securities and Exchange Commission ("Commission") concerning H.R. 1858, the "Consumer and Investor Access to Information Act of 1999." This testimony will focus specifically on Title II of the bill, which relates to securities market information.

Introduction

In many important respects, a market can be defined most simply as the exchange of information about the buying and selling interest in a product—in particular, quotations as to the price and size at which buyers and sellers are willing to trade, the interaction of individual buy and sell interests, and the price and volume of transactions that are taking place. A market's quality depends on the extent to which this information is timely, comprehensive, and reliable.

In the U.S. securities markets, on an average trading day in 1998, reports of more than 12 million transactions and quotations were disseminated on a real-time basis.¹ This information was made available pursuant to joint securities industry plans for collecting, verifying, and distributing consolidated market information as mandated by the Securities Acts Amendments of 1975.²

The real-time stream of information is then taken by vendors and broker-dealers and distributed, through a myriad of different delivery devices, to the millions of retail investors, institutions, securities firms, traders, derivatives markets, and other participants in the U.S. securities markets. The end result is that, regardless of where investors may be geographically, they are in the midst of the exchange of information concerning buying and selling interest and therefore are part of the market itself. The worldwide exchange of consolidated, real-time information concerning transactions and quotations on the U.S. securities markets must be considered one of the great regulatory and technological achievements of our era, as well as one of our national resources.

It is this resource that H.R. 1858 is designed to protect. The bill would prohibit the misappropriation of real-time market information and would provide new remedies against those who would violate this prohibition. The bill also is carefully crafted to address the new problem of information theft from high-technology systems without disturbing the regulatory and contractual regimes that are responsible for producing the benefits we already have. The Commission therefore supports the bill as a balanced and reasonable legislative approach to continue the widespread availability of real-time market information.

Genesis of Consolidated Market Information

The seemingly ever-expanding flow of information produced by innovative technology has become so much a part of modern life that we perhaps have begun to take it for granted. The need for H.R. 1858 cannot be fully appreciated, however, without pausing, at least briefly, to consider the value of what we have and the extent to which consolidated real-time market information did not just happen by chance. Rather, it was the result of planning and concerted effort over the last 30 years by the Congress, the Commission, the self-regulatory organizations, and the securities industry as a whole. Moreover, these plans and efforts were brought to fruition only through an enormous investment of capital by the self-regulatory organizations and the industry.

¹ Sources: American Stock Exchange; Nasdaq Stock Market; New York Stock Exchange; Options Price Reporting Authority.

² Pursuant to rules adopted by the Commission under Section 11A of the Securities Exchange Act of 1934, the self-regulatory organizations jointly have filed plans providing for the consolidated dissemination of market information.

The New York Stock Exchange first published reports of trades, by teletype, in 1867. Other markets later published trade reports also, but no central source of information on trading in a security existed. Exchanges also began making quotes known beyond their floors, but only market by market, and only to their members.

In February 1972, the Commission issued a "Statement on the Future Structure of the Securities Markets" in which it emphasized the central role that consolidated information would play in the development of a national market system. Although the markets at that time were described as "scattered" and the technology for a communications system to link the markets was merely "said to be available," the goal for the future was clearly enunciated: "to make information on prices, volume and quotes for securities in all markets available to all investors, so that buyers and sellers of securities, wherever located, can make informed investment decisions."³

Three years later, as part of the Securities Acts Amendments of 1975, Congress created the legislative framework that was necessary to make this goal a reality. Emphasizing the critical importance that investors have access to "accurate, up-to-the-second" market information,⁴ Congress greatly expanded the Commission's authority over the processors and distributors of securities information by adding Section 11A to the Securities Exchange Act of 1934 ("Exchange Act."). Specifically, the Commission was authorized to require the self-regulatory organizations to act jointly to develop the systems necessary to provide consolidated market information. In addition, Section 11A granted the Commission rulemaking authority to assure the prompt dissemination of market information on terms that are fair, reasonable, and non-discriminatory.

Using its authority under Section 11A, the Commission has adopted a number of rules that require the collection and dissemination of consolidated information concerning transactions and quotations in equity securities. In addition, the rules create a framework under which the self-regulatory organizations are encouraged to act together to expand the availability of consolidated market information for equities. Pursuant to these rules, the self-regulatory organizations have designed and funded the technology systems that now put real-time market information on equities and options in the hands of investors around the globe.

Recently, the Commission has encouraged efforts to increase transparency in the debt markets. The Municipal Securities Rulemaking Board, with the approval of the Commission, has developed next-day reporting for active municipal securities. Industry efforts, with the support of Congress and the Commission, developed GovPX, enhancing market information on government and agency securities. The Commission has asked the National Association of Securities Dealers to develop a reporting and surveillance system for corporate bonds, an initiative supported by this Committee in hearings and subsequent legislation, which passed the House earlier this month.

The benefits of this information stream are as important as they are familiar. Consolidated market information increases transparency, addresses fragmentation, and facilitates the best execution of customer orders. In sum, the success of the U.S. securities markets over the last three decades in providing efficient sources of capital is due in no small part to the quality and timeliness of market information, and this market information is provided pursuant to the legislative framework Congress established in Section 11A of the Exchange Act.

Commission Study of Market Data Fees and Their Role in Funding the Self-Regulatory Organizations

Of course, success in the past does not ensure continued success in the future. The non-stop change associated with innovative technology can produce problems, as well as benefits. Recently, some aspects of the current system for collecting and disseminating market data have been questioned. In particular, the rising number of on-line investors has focused attention on their need for information that is easily available on terms that are fair, reasonable, and non-discriminatory. In addition, new technologies for trading securities have created pressures on market structure that may have implications for the current system of providing market information.

To address these developing issues, the Commission has undertaken a review of the structures for obtaining market data and the role of data revenues in the operation of the markets. As part of this review, the Commission intends to issue a release describing existing market data fees and revenues, as well as their relationship to the funding of the self-regulatory organizations. While we have gathered a significant amount of data on these subjects, we are just in the preliminary stages

³ Securities and Exchange Commission, "Statement on the Future Structure of the Securities Markets," at 9 (February 2, 1972).

⁴ S. Rep. No. 75, 94th Cong., 1st Sess. 9 (1975).

of our analyses. Unfortunately, without the benefit of completing this review, we are unable to make judgments on specific issues regarding data collection and distribution costs or on any suggested structural improvements.

Nevertheless, it is clear that the extensive system for collecting and disseminating real-time market information must be protected from those who would "pirate" the information without contributing to the costs of supporting the system. It therefore is important to protect real-time market information against misappropriation and outright theft. The Commission supports H.R. 1858 as a reasonable means to help achieve this objective.

Strengths of H.R. 1858

Section 201 of the bill adds a new paragraph (e) to Section 11A of the Exchange Act. It prohibits the misappropriation of real-time market information and provides a variety of remedies for market information processors against persons who violate this prohibition, including monetary damages, disgorgement of ill-gotten gains, and injunctive relief. The bill thereby provides important new remedies to address a serious new problem—the vulnerability to theft of information distributed through high-technology systems.

Moreover, H.R. 1858 preserves the two principal attributes of the current system for providing market information that have produced the benefits we have secured over the last thirty years—(1) the Commission's regulatory authority over the collection and dissemination of market information, and (2) freedom of contract for self-regulatory organizations and market participants to structure their business relations.

The bill expressly provides that it is not to be construed to either limit the application of the federal securities laws or to impair the authority of the Commission. As noted earlier, Congress' decision in 1975 to direct the creation of a unified, national market system and to grant the Commission plenary authority to achieve this goal was perhaps the single most important decision that led to the current widespread availability of consolidated, real-time market information. The bill reaffirms the authority of the Commission in this regard.

H.R. 1858 also would grant rulemaking authority to the Commission to prescribe the extent to which market information is considered to be "real-time" market information for purposes of Section 11A. If necessary, therefore, the Commission would be empowered to ensure that, on the one hand, a narrow definition did not threaten the integrity of current systems for providing real-time information, and, on the other hand, that an overly broad definition did not unnecessarily restrict the free flow of information.

The bill enumerates three factors that the Commission is to consider in defining real-time information—the present state of technology, the different types of market data, and how market participants use the data—all of which would be important if the Commission found it necessary to exercise its rulemaking authority. In exercising this authority, the Commission of course would consider the goal of preserving and expanding the availability of real-time market information.

Another important strength of the bill is that it does not disturb the ability of market information processors, information vendors, and information users to fashion their own arrangements for distributing real-time market information. The freedom of parties to choose the terms on which they contract and the remedies available for breach, as well as the highly-developed law of contracts that supplements these agreements, is a tested regime for implementing efficient commercial arrangements.

H.R. 1858 wisely leaves these arrangements intact. It preserves the rights of parties freely to enter into licenses or other contracts with respect to the dissemination of real-time market information. The bill also does not allow a market information processor to substitute the bill's remedies for contractual remedies in actions against those parties with whom the processor has chosen to enter into contractual relations. Instead, by focusing on the peculiar nature of market information, and its susceptibility to misappropriation and theft by parties that have no contractual relationship with a market information processor, the bill provides new remedies that are tailored to respond to new problems.

Conclusion

In conclusion, the Commission believes that Title II of H.R. 1858 represents a balanced and reasonable legislative approach to address the problem of information theft.

Mr. OXLEY. Thank you very much. The Chair will recognize himself for 5 minutes for questions.

Ms. Nazareth, how significant is the use by retail investors of real-time quotes today, and how has online investing affected the use of this information by investors?

Ms. NAZARETH. I don't think there is any question but that with the incredible proliferation of online trading, we have seen a much greater increase in the use of real-time data by investors. That is why that we are in the process of studying the issue of dissemination of that data and the cost structures.

Mr. OXLEY. In fact, it's really been an exponential growth?

Ms. NAZARETH. Yes, it has.

Mr. OXLEY. Has the SEC done any studies in terms of where that is leading us in the future and what those numbers might look like a few years out?

Ms. NAZARETH. I don't think we have specifically studied where we think it is going. We have certainly done a lot of reviewing of the issues of online trading. But certainly one thing that has been very clear is that the growth has been exponential.

Mr. OXLEY. Why is it important then for the Commission to attain regulatory authority over the dissemination of stock quotes and the fees charged?

Ms. NAZARETH. Well, a key element of section 11A is not only the gathering and dissemination of the information, but the consolidation of the information. The value of the real-time data here to the investor is that regardless of where the trading activity occurred, an investor would be able to see on a real-time basis where the buy and sell interest is on a particular security. So what has made this system so successful over the last 30 years is that we have effectively provided consolidated real-time information to investors throughout the marketplace no matter where they are geographically.

Mr. OXLEY. What information do the SROs provide to you and the public about the cost of the collection and dissemination of stock quote information, as well as, the uses of the revenues generated by fees for this data?

Ms. NAZARETH. Historically, the statute provides that the Commission has authority to determine whether the fees charged are fair and reasonable, and we have historically obtained the information that we thought was necessary to make that determination.

I think what has happened more recently is that we have seen not only an exponential increase in the amount of online trading and therefore a very large increase in the use and the public interest in obtaining this real-time information, but also we had a number of pilot programs that were permissible under our regulations that permitted the SROs to test different pricing structures.

Those pilot programs did not require us to determine the fairness of the pricing at the time. And so the combination of the fact that there were pilot programs now coming under more scrutiny as a result of the changing environment is causing us to really reexamine the whole issue to determine that this information is being appropriately disseminated in a fair and reasonable way.

Mr. OXLEY. I understand that the Commission is examining the transparency of market data, cost and uses of this ongoing study. Do you believe there should be greater transparency of this infor-

mation and greater accountability of the SROs for their uses of the revenues generated by these fees?

Ms. NAZARETH. Certainly, as part of our study, we are going to shed a great deal of light on the cost structures and the pilot programs that I mentioned before that currently the SROs are operating under. I think also at that time we will invite comment on whether there should be some greater transparency in general with respect to the whole manner in which these fees are charged.

Another obviously very important part of our concern as the regulatory agency is not only the cost structure but the fact that we consider it very important that part of these fees is going to support the SRO function itself which is obviously terribly important from an investor protection standpoint.

Mr. OXLEY. What type of timeframe do you have with that study?

Ms. NAZARETH. I think we are hoping for late summer or early fall to come up with the concept release.

Mr. OXLEY. Do online investors pay to access real-time stock quotations?

Ms. NAZARETH. For the most part, online investors have not been paying directly for those costs. Those costs have generally been borne by the firms that are providing them with the information.

Mr. OXLEY. What if they pick up the phone and call their broker? Do they pay for that?

Ms. NAZARETH. I think in general they probably do not.

Mr. OXLEY. They do not?

Ms. NAZARETH. I don't think for the most part they do.

Mr. OXLEY. At least directly?

Ms. NAZARETH. Yes.

Mr. OXLEY. My time has expired. The gentleman from New York, the ranking member, Mr. Towns.

Mr. TOWNS. Thank you, Mr. Chairman. In your view, Ms. Nazareth, are the fees for market data excessive or unfair?

Ms. NAZARETH. I don't think we are in any position at this point to determine. Certainly the fees that the Commission has reviewed in the past we have made the determination are fair and reasonable. What we are undertaking as part of our study is to look at the fee structures that were permitted under the pilot programs and to basically open that whole process up for comment and to look again at the cost structures and consider what other factors should go into our determination as to whether the fees are fair and reasonable. We have not made a determination at this point.

Mr. TOWNS. You say in the event that if the fees were lowered, market data fees were lowered, is there any mechanism for ensuring that these savings could be passed on to consumers?

Ms. NAZARETH. Again that is something that we would have to consider as part of the study. Right now, as I mentioned to Chairman Oxley, I don't think that the consumers are directly bearing these costs now. One of the very positive elements of how this whole regime has worked up to now is not only is this real-time data being very effectively collected and disseminated on a real-time basis, it has also been very widely available to the investing public without the investing public bearing the direct cost of it.

Mr. TOWNS. If a stock exchange were to make a request for a reduction in its fees for real-time market data, what process would the SEC use in evaluating that?

Ms. NAZARETH. If they requested that the fees go down?

Mr. TOWNS. Yes.

Ms. NAZARETH. Again, I think we would determine whether the fees were fair and reasonable and that the fees were not unreasonably discriminatory.

Mr. TOWNS. Let me be specific. What process would the SEC use in evaluating the New York Stock Exchange's recent request for a reduction in its fees for real-time market data?

Ms. NAZARETH. Again, we would apply the statutory standard, is it fair and reasonable. So we would obviously want some information. Going forward again we will consider whether to add to factors we are considering, but we will look at the cost structure and we will look at how those fees are being applied and is it in the public interest, is it fair and reasonable to apply them on that basis.

Mr. TOWNS. Tell me a little more about the pilot program, how that works.

Ms. NAZARETH. The pilot program has permitted the SROs to experiment with different pricing regimes to see whether they might—it gave them an opportunity to test different pricing structures to see whether they worked and whether they were favorably received. They have had historically various pilot programs under which they tested different pricing models.

Mr. TOWNS. Thank you, Mr. Chairman. I yield back.

Let me ask one more thing before I yield back. In your opinion, what is the most challenging aspect of overseeing the national market system? What is the most challenging?

Ms. NAZARETH. There are so many challenges, it's hard to pick. Obviously we are charged with ensuring that we have fair and orderly markets, and there are a tremendous number of elements that goes into whether one has fair and orderly markets. What we are focusing on today is one very significant element to that, which is the wide dissemination of market information which obviously goes to the whole transparency and fairness of the market itself.

Mr. TOWNS. So you wouldn't want to list any categories—

Ms. NAZARETH. Certainly things like investor protection obviously is very important. Market transparency, best execution, all of the things that I am sure you hear us testifying about under any number of circumstances. They are all quite important.

Mr. TOWNS. I yield back, Mr. Chairman.

Mr. OXLEY. The gentleman yields back. The gentleman from New York.

Mr. FOSSELLA. Thank you, Mr. Chairman. Just as a follow-up to Mr. Towns's question regarding the collection of the market data fees and the cost to consumers. What was the total value generated by these market data fees last year?

Ms. NAZARETH. I don't know. I just don't have that number handy. I could try to get that for you.

Mr. FOSSELLA. I guess there are some estimates that it exceeds \$400 million. Out of curiosity, isn't that arguably a cost that otherwise could be saved by investors or consumers?

Ms. NAZARETH. Well, again, I don't think that the investors or consumers have been directly bearing that cost. Whether it is some way indirectly passed onto consumers, I don't know. But generally I think the firms have not been passing along that cost so the—those elements of the industry that have been unhappy with the current fees are obviously concerned not only because they are bearing the cost but they are not passing them on.

From the Commission's perspective, obviously the thing that we think is so important is that the investors, in fact, have had access, wide access to this information. It has, in fact, not been costing them directly at this point. This real-time information is quite widely accessible.

Mr. FOSSELLA. I think all else being equal, the acquisition of a \$400 million fee associated with any of these transactions—let's suppose that number was \$40 billion for the sake of argument. I think that it could be recognized that it could be passed onto the consumer in the form of savings or tax on capital in the transaction.

Ms. NAZARETH. Obviously, it is part of the whole issue that we need to analyze, which is what are the revenues to the SROs, what are the costs associated with collecting and gathering and disseminating that information on a consolidated basis. It is certainly appropriate to look at all of those issues, but it has got to be considered as part of the larger issue of what are the costs.

Mr. FOSSELLA. Along those lines, the Commission recently stated that there have been technological developments that would allow vendors to provide more cost-effective execution of the security transactions?

Ms. NAZARETH. Yes.

Mr. FOSSELLA. So by extension, would that mean that the market data fees should be decreasing as a result from the efficiencies?

Ms. NAZARETH. I think again when we review the costs, there are a number of elements in our study that we will look at. One element of it—and an element that you suggest may be going down—are the incremental dissemination costs. Obviously the hardware and the infrastructure that has been built to gather this information—basically, the computer and hardware costs associated with that—also have to be considered.

Again, I am not making a judgment as to where that is going to come out, but there are a number of elements to the cost structure.

Mr. FOSSELLA. I look forward to the release of that study. However, if one of these elements given the efficiencies of technological developments is allowing for the market data fees to decrease, these other elements presumably, if they cumulatively or individually allow for more efficiencies, then there is no way that the market data fees should be stagnant. If anything, they should point to the fact that these fees should be reduced, right?

Ms. NAZARETH. I assume that if all of the factors are as given, that may be what the study shows. But we will certainly keep an open mind about it.

Mr. FOSSELLA. I yield back, Mr. Chairman. Thank you very much.

Mr. OXLEY. The gentleman yields back. The gentlelady from California.

Mrs. CAPPS. I would posit that investors perhaps are bearing the cost, whether directly or indirectly. Perhaps you could speak briefly on that. I have another topic that I want to bring up, too.

Ms. NAZARETH. The evidence that we have is most firms, probably for competitive reasons, for the most part are not directly passing the cost along to the retail public. As to how they would be doing it indirectly, I don't know. Obviously one could argue that there would be other methodologies by which they could get back some of those fees, but I don't know exactly how they would be doing it.

Mrs. CAPPS. Something related to the cost of their doing business in general?

Ms. NAZARETH. Yes.

Mrs. CAPPS. I am most interested in learning from you your advice for Congress as we struggle with how to find a balance between whether these are simple facts or a compilation of the facts that belong to people who do the work. I think this is the area that we are going to be struggling with and wrestling with, and I came to learn about that. If you could expand on that a little about that would help me.

Ms. NAZARETH. Which isn't addressed in this bill—

Mrs. CAPPS. I understand. It is related.

Ms. NAZARETH. Certainly section 11A by its terms states that this is information that is important to be gathered and that that can be charged for in some way. By providing for fair and reasonable fees, it assumes that fees can be charged, so the issue is how do we determine what is fair and reasonable for real-time data.

Some of these issues obviously you address a little bit in your bill. But it is part of the whole study that we are going to have to really analyze what goes into the cost structure, what is the real-time data, how should this be working in the future, and, obviously, in an environment that changed quite significantly over time because of the advantages in technology.

Mrs. CAPPS. Have you figured out a format for how to do this kind of measurement?

Ms. NAZARETH. Not yet. We are in the process of measuring it.

Mrs. CAPPS. Where would you go to get resources for making these determinations?

Ms. NAZARETH. Some of the background information on the costs and the cost structures, we have obtained directly from the SROs. Then we are opening—the study—we are calling it a study. It is actually a concept release. We are opening up the whole issue to the public. There will be a notice and comment period. We will be getting a number of comments on how people think they should be analyzed.

Mrs. CAPPS. So you are allowing a lot of different kinds of—

Ms. NAZARETH. Oh, yes. We are referring to it as a study, but it is actually a concept release that will be open for notice and comment.

Mrs. CAPPS. Okay. I have no further questions. Thank you.

Mr. OXLEY. The gentlelady yields back. The gentlelady from Colorado, Ms. DeGette.

Ms. DEGETTE. Thank you, Mr. Chairman. I really have no questions for this witness. Let me just say, as I came in a few minutes

after the opening statement, that I am really glad that we are talking about this bill in particular because I think as Internet business grows at break-neck speed, the brokerage industry is going to have to meet the demands for greater access to accurate and timely information. And I know almost every day we grapple with this issue in the subcommittee.

I think the crux of the issue we are talking about today and perhaps over time in a broader context is what do we do about property rights, as this witness testified, and how does that extend to other industries? It is a very real issue; and I look forward to dealing with it, both with this bill and other issues. Thanks, and I yield back.

Mr. OXLEY. The gentlelady yields backs; and we thank you, Ms. Nazareth, for your excellent testimony and helping the panel understand this very difficult issue. Thank you very much.

The Chair would now call the second panel to the witness table. In the interests of time, I will introduce you as you move forward. Mr. Michael Hogan, senior vice president and general counsel for DLJdirect from Jersey City, New Jersey; Mr. J. Joe Ricketts, chairman and co-CEO of Ameritrade Holding Corporation from Omaha, Nebraska; Mr. Stuart Bell of Bloomberg Financial Markets in Princeton, New Jersey; Ms. Carrie Dwyer, executive vice president for corporate oversight from Charles Schwab and Company of San Francisco; Mr. S. Dean Furbush, senior vice president and chief economist of the National Association of Securities Dealers here in Washington; Mr. Richard P. Bernard, executive vice president and general counsel of the New York Stock Exchange, New York City.

Thank you to all of you.

Mr. Hogan, welcome back. It is good to have you back again. We will begin with you, since you are all warmed up from last week. Thank you.

STATEMENTS OF MICHAEL J. HOGAN, SENIOR VICE PRESIDENT AND GENERAL COUNSEL, DLJDIRECT; J. JOE RICKETTS, CHAIRMAN AND CO-CEO, AMERITRADE HOLDING CORPORATION; STUART BELL, BLOOMBERG FINANCIAL MARKETS; S. DEAN FURBUSH, SENIOR VICE PRESIDENT AND CHIEF ECONOMIST, NATIONAL ASSOCIATION OF SECURITIES DEALERS; RICHARD P. BERNARD, EXECUTIVE VICE PRESIDENT AND GENERAL COUNSEL, NEW YORK STOCK EXCHANGE; AND CARRIE DWYER, EXECUTIVE VICE PRESIDENT, CORPORATE OVERSIGHT, CHARLES SCHWAB AND COMPANY

Mr. HOGAN. Thank you, Mr. Chairman. Good morning, Chairman Oxley, Congressman Towns, and members of the subcommittee. My name is Michael Hogan, and I am the senior vice president and general counsel of DLJdirect, an online brokerage firm with over 600,000 online subscribers. I am very pleased to be here today to represent DLJdirect and to speak in support of H.R. 1858.

As you are aware, my testimony today will focus on title II of the proposed legislation addressing the issue of market data. I thank you, ranking member Towns, and other cosponsors of this bill for your leadership in addressing this critical consideration.

This bill protects market information processors against hackers or others who will undermine the integrity of the data they disseminate, and it safeguards the ability of consumers to access this important information at the lowest possible cost. I would like to focus briefly on a few critical points that are separate from my full statement which has been inserted into the record. The Internet has revolutionized the securities industry so dramatically that it is virtually unrecognizable from only a few years ago. At least 6.3 million Americans currently invest online; at least 20 million households use the Internet for investment information. Every day one of every three individual trades is executed online. How important to the public is readily and affordable access to real-time market information? Customer demand speaks for itself. In the most recent 30-day period for which figures are available, *DLJdirect* consumers accessed over 53.5 million real-time quotes. That is in addition to an uncounted number of delayed quotes that we do not track.

DLJdirect agrees with Chairman Bliley's statement that facts cannot be owned. Instead, they are in the public domain. In particular, we believe that real-time market information should not be owned or be considered property.

Mr. OXLEY. Sorry about that. I didn't reload.

Mr. HOGAN. H.R. 1858 strikes the right tone by rejecting a property-right approach to real-time quotes. A few particular points deserve mention. First, H.R. 1858 provides a limited right to civil action against misappropriation without interfering with the existing contractual relationships and without creating an unnecessary and chilling criminal right of action.

Second, we support the bill's endorsement of the principle that expectations of real-time will change with technology and that the Securities and Exchange Commission is the appropriate party to deal with this fact. Title II of H.R. 1858 extends protection only to real-time market information, but in trying through legislation the guiding criteria to be used in making and continuously reviewing that determination.

Third, the explosion of online investing has led to an unexpected windfall for securities markets. According to one recent report, the markets earned \$413 million from the sale of market data in 1998. It is inconceivable that the direct costs involved in collecting and distributing the information in any way approach \$413 million.

Substantial prices for access to real-time market data result in additional costs to consumers; frequently in the form of higher trade prices or fees for other investment services. In a perfect world, real-time market data, like delayed data, should be entirely in the public domain. The provision of market information collected from the public should not become a source of profit for the securities marketplaces which are not-for-profit organizations.

However, compiling real-time information is not without some cost. But what is important is that this bill leaves intact the SEC's existing authority needed to ensure public access at a reasonable price. We at *DLJdirect* thank the subcommittee and the committee as a whole for its direction and leadership in protecting consumer and investor access to market data.

Mr. Chairman, I greatly appreciate the opportunity to be here with you and would be happy to address any questions that you or the other members might have. Thank you.

[The prepared statement of Michael J. Hogan follows:]

PREPARED STATEMENT OF MICHAEL J. HOGAN, SENIOR VICE PRESIDENT AND
GENERAL COUNSEL, DLJdirect® INC.

Good morning, Chairman Oxley, Ranking Member Towns, and members of the Subcommittee. My name is Michael Hogan, and I am the Senior Vice President and General Counsel of DLJdirect Inc. DLJdirect is the online brokerage firm of Donaldson, Lufkin & Jenrette, Inc., with over 600,000 online subscribers. I am very pleased to be here today to represent DLJdirect and to speak in support of H.R. 1858, the "Consumer and Investor Access to Information Act of 1999." As you are aware, my testimony today will focus on Title II of the proposed legislation, addressing the issue of securities market information and real-time market data. At the outset, I would like to express DLJdirect's appreciation to you, Chairman Bliley, Congressman Towns, and the other co-sponsors of this bill for your leadership role in protecting market information processors against hackers or others who undermine the integrity of the data they disseminate while leaving to the Securities and Exchange Commission ("SEC") the role of assuring the lowest cost distribution of real-time quotes by online brokers and others to consumers.

DLJdirect was founded just over ten years ago as a division of Donaldson, Lufkin & Jenrette. In the decade since we were founded, the financial services industry has undergone a tremendous transformation. The Internet has enabled millions of consumers to become self-directed investors by lowering transaction costs, increasing access to market information, and providing greater convenience and speed. As Chairman Bliley noted in introducing this legislation, currently 6.3 million Americans invest online, and 20 million households use the Internet for investment news, quotes, and ideas. Each day, 1 of every 3 individual trades is executed online. Analysts predict that by the year 2000, ten million Americans will be managing their investments online.

The Need For Accurate And Timely Information

DLJdirect's online customers are a different breed of investor than past investors who executed transactions through traditional, offline brokers. Our online investor is self-directed and desires the same access to information that traditionally brokerage firms supplied only to their brokers. To be competitive, an online broker must provide both customers and potential customers access to all forms of financial information, including press releases and news accounts, research reports, and price quotes—specifically, real-time price quotes during trading hours. DLJdirect customers accessed over 53,500,000 real-time quotes, in addition to an uncounted number of delayed quotes, during the mid-April to mid-May one-month reporting cycle. This information, which only a few years ago was available only to brokerage firm salespersons and traders, empowers those self-directed investors to manage their own financial affairs using current and accurate information in a convenient, "one-stop shopping" package.

And we aren't the only providers of investment information in this new online financial universe. Financial information and data also is offered by Internet portals and other non-broker financial sites, which all make immediately available a plethora of data that just a few years ago would have been unimaginable.

As this brief description indicates, information is an essential part of our service. And "real-time" quote information is its most central component. An online investor, whether considering an investment, logging in to monitor an account balance, or checking on a news story, wants to know the price of the stock in question at that moment in time. The power of the Internet is that it permits us immediate access to current information; anything less than "real-time" is for many purposes unacceptable.

Through access to real-time market information, online investors gain the ability to make investment decisions based on the same information possessed by brokers and other individuals who are in the know. As Chairman Bliley recognized in his background report submitted with H.R. 1858, "This access to information about the stock market has empowered investors and given them greater control over their finances."

H.R. 1858 Strikes The Right Balance

DLJdirect supports H.R. 1858 because it protects rights to databases while ensuring the continued free flow of important market information to consumers—a flow that has grown increasingly important in our Information Age.

Five aspects of the bill deserve particular mention:

- *First*, H.R. 1858 provides a limited right of action against misappropriation and leaves contractual relationships unaffected.
- *Second*, it recognizes that market data belongs in the public domain.
- *Third*, the legislation distinguishes between “real-time market information” and delayed market data.
- *Fourth*, the bill leaves intact the SEC’s authority to implement the national market system for securities and regulate market information processors.
- *Fifth*, H.R. 1858 provides a sober, measured, yet effective array of civil remedies for violations of its provisions and establishes a reasonable statute of limitations.

H.R. 1858 Creates A Nuanced Right Of Civil Action That Does Not Intrude On Contractual Relationships

H.R. 1858 addresses what market information processors perceive to be a gap in existing forms of protection for data compilations without creating wholly new categories of protection that might result in impediments to the free flow of the underlying information. The bill accomplishes this by creating a limited right of action against misappropriation by those with whom the information processor maintains no contractual relationship.

H.R. 1858 Recognizes That Market Data Belongs In The Public Domain

We at DLJdirect applaud Chairman Bliley’s ringing affirmation of the principle that “facts cannot be ‘owned.’ Instead, they are in the public domain.” This basic understanding is particularly true in the context of the markets and more than justifies the carefully nuanced protection extended to market information in this bill.

Long ago, Congress recognized the importance of a national market system. In 1975, it significantly amended the Securities Exchange Act of 1934 to coordinate public dissemination of market data by bringing together orders and trades from public customers, routed through brokers, to exchanges or market makers for execution. The last sale data is then routed back through a centralized conduit, the Consolidated Tape Association, to brokers, and made available for the benefit of the next customers. Congress should ensure that this type of data—initiated by consumers, used by consumers, and which clearly is of public interest—remains readily accessible at the cheapest possible cost to all.

Moreover, there is no need to ensure an “incentive” to the information processor to compile this information. The nation’s securities markets are obligated by U.S. law to do so. Thus, there is little reason as a matter of policy to accord them greater protection than this bill already embodies.

H.R. 1858 Endorses The Principle That Expectations Must Change With Technology

Title II of H.R. 1858 extends its protection only to “real-time” market information. It is our view that many forms of non-real-time, or delayed, market information will not receive added protection under this bill. As the Subcommittee is aware, section 101(6)(B) of the bill expressly excludes databases “required by Federal statute or regulation” from H.R. 1858’s added protection. Thus, because delayed market information is not included in Title II and, in many respects, is expressly excluded from the scope of Title I, its status will be unaffected by this legislation. That is entirely appropriate.

Even more important is the bill’s grant to the SEC of the authority to define “real time” and its express recognition of the need to consider the evolving capabilities of technology and the expectations and needs of market participants. As technology advances, and people’s expectations increase, the appropriate scope of what they consider timely or “real-time” inevitably will change. In the online world, customers demand real-time information that is, indeed, immediate, or at least within seconds of the last trade execution.

In any event, H.R. 1858 wisely leaves the details of what real-time includes to the experts, the SEC, but enshrines in legislation the guiding criteria pursuant to which the agency should make that determination.

H.R. 1858 Leaves Intact The SEC’s Authority To Implement The National Market System and Regulate Market Information Processors

Ensuring that the investing public has access to real-time market information is not enough. Congress also must leave in place the mechanism needed to ensure pub-

lic access at a reasonable price, a price that does not deter consumer access. The explosion in online investing has led to an unexpected financial windfall for securities markets. According to a recent report conducted on behalf of the Securities Industry Association, the markets earned \$413 million from the sale of market data in 1998. Just to offer one example of the impact of these revenues on a single market, the New York Stock Exchange, Inc. ("NYSE") alone collected \$111 million in fees for access to market data. This \$111 million comprised 15.3% of the NYSE's revenues for 1998. As usage of the Internet for investment purposes increases, so does the revenue gained from sale of the real-time market information.

DLJdirect and the rest of the online broker community recognize the costs involved in maintaining the complex base of data required by law and by public expectations. Yet, *because* maintenance of this data is legally required, the classic rationale for enhanced protection—to provide adequate incentives so that databases will continue to be created—is absent. It is inconceivable that the costs entailed in collection and distribution of this data in any way approach the revenues received. Moreover, the rapid increase in demand for real-time quotes, and concomitant surge in revenues earned from sale of the information by the securities markets, presumably entails no additional or commensurate cost increase, adding even further to this disparity.

H.R. 1858 properly leaves the SEC as the arbiter of the correct cost recovery formula to ensure the industry can provide real-time market information to the public.

H.R. 1858 Adopts A Measured Approach Toward Remedies For Misappropriation

Finally, DLJdirect also supports the decision by the sponsors of H.R. 1858 to provide for civil equitable and legal remedies that are flexible enough to deter and compensate for misappropriation, without creating the specter of criminal prosecution in a newly created and unsettled legal landscape. DLJdirect also believes that a one-year statutory limitation period for misappropriation of data that is of fleeting value is entirely reasonable and, again, exemplifies the measured approach that H.R. 1858's sponsors have embraced.

We at DLJdirect thank the Subcommittee and the Committee as a whole for its direction and leadership in protecting consumer and investor access to market data. Mr. Chairman, I greatly appreciate the opportunity to be here with you today and would be happy to address any questions you or the other members might have.

Thank you.

Mr. OXLEY. Thank you.

Mr. Ricketts from Ameritrade.

STATEMENT OF J. JOE RICKETTS

Mr. RICKETTS. Thank you kindly for inviting me. It is my pleasure to be here. This is an issue that is near and dear to my heart, to the heart of my customers, and to the heart of my shareholders. I have a prepared statement that I am going to deviate from because I find a greater degree of sophistication here than I was aware was going to be here.

Mr. OXLEY. Without objection all of your statements will be made part of the record, so feel free to give us your best shot off the record.

Mr. RICKETTS. Thank you. I have been in this business for a long time. To give you an idea of who I am and what the company is, I started in the securities business in 1968, started the discount broker in 1975. We were the first to bring touch tone telephone and trading and quotes to the market in 1988, and we were the first to have Internet trade in August 1994. So, although I am not a technician, I understand what technology does for the benefit of our customers who represent people in this room. We don't do business with institutions. Our customers are strictly Mr. and Mrs. America.

We do about 3 percent of the trades in numbers on NASDAQ and the New York Stock Exchange. We are fifth or sixth in size of on-line brokers. So we represent a substantial part of the market and these quote fees are very important to our customers.

We used to charge our customers. We used to pass on the fees directly charged to us by the purveyors in a direct cost. Our competitors started giving it away so we started giving it away at that time. We took away that direct charge to our customers and incorporated that charge into our cost. Every time that we reduced the friction to our customers, that is bring more information at a lower cost, we increase the activity in our customer accounts. It is a benefit. It increases the liquidity and the breadth and depth of the market. When we have to increase the cost to our customers, of course just the reverse is happening. The very discriminatory fees that exist today have a very detrimental effect on the individual investors, the type of people that we have in this room that would want to invest for their own particular accounts.

Now, with respect to this particular bill, protection of the database is extremely important. We are all in favor of that. It needs SEC oversight. The thing that we want to be careful about is setting up a monopoly where we have one purveyor of information and we are going to be subject to whatever that purveyor is going to charge. We have already seen the misuse of the cost in the dollar figures that you and everybody else has talked about this morning.

So my customers and myself purport that that information of flow to the marketplace that makes up the bid and ask, that is, the orders to place buy and sell orders belongs to my customers. So instead of being charged for the bid and ask last sale of market information, we should be paid for that information because we are the ones providing the flow of information to the exchanges and to the purveyors that then put together this information and make it available to the rest of the world.

Thanks. I would be open to any questions.

[The prepared statement of J. Joe Ricketts follows:]

PREPARED STATEMENT OF J. JOE RICKETTS, CHAIRMAN AND CHIEF EXECUTIVE OFFICER, AMERITRADE HOLDING CORPORATION

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to appear before you today. My name is Joe Ricketts and I have served as a director and as Chairman and Chief Executive Officer of Holding since 1981. In 1975, I became associated with Ameritrade and served as a director, officer and stockholder. Prior to 1975, I was a registered representative with a national brokerage firm, an investment advisor with Ricketts & Co. and a branch manager with The Dun & Bradstreet Corporation. I am a director of Knight/Trimark, the largest market-maker in the world, CSS Management, Inc., a software development firm for the brokerage industry, and for Net.B@nk, Inc., an Internet banking firm. I serve still as a member of the District Committee for District 4 of the NASD. I am a member of the Board of Trustees for Father Flanagan's Boys' Home (Boys Town) and serve on the Board of Directors of Creighton University. I received my B.A. in economics from Creighton University.

Ameritrade

Ameritrade is a leading full-service provider of low-cost, high-value online discount brokerage services to the rapidly expanding population of self-directed investors in the U.S. and abroad. Ameritrade was formed in 1997 through the consolidation of three previously independent operating units—Ceres Securities, Inc., K. Aufhauser & Co. and the Broker division of All American Brokers, Inc. In October 1997, we launched a major advertising campaign to introduce our revolutionary "8 bucks a trade" campaign and began emphasizing our Ameritrade brand as the major player in the low commission segment of online brokerage. The campaign succeeded in building brand awareness, helping us to open 225,000 new accounts and add a net \$4.1 billion to assets in customer accounts during fiscal 1998. Since the campaign's introduction, trades per day have grown at a 312% compound annual growth rate.

Online Discount Brokerage Industry Overview

The discount brokerage industry in which we compete has grown rapidly in the past decade. This expansion has been driven primarily by the enduring strength and recent growth of the U.S. equity markets. Equity market capitalization in the U.S. has doubled in size in the past five years, to approximately \$13.5 trillion. The opportunity to earn superior returns and create wealth has attracted an increasing number of investors to the securities markets. Discount brokerage growth has been driven by increased accessibility to and affordability of brokerage services made possible by rapid advances in communications and processing technology and by increased competition among brokerage companies.

Internet penetration continues to rapidly increase. International Data Corporation ("IDC") estimated that there were 56 million Internet users in the U.S. by the end of 1998. The Internet enables investors to identify, analyze and transact investment opportunities at far lower costs than previously available. These factors have yielded tremendous growth also for online discount brokers. According to IDC, online brokerage daily trading volume more than tripled during the two year period of 1997 and 1998 to more than 300,000 trades per day. Over that same time period, the number of online brokerage accounts grew from 1.6 million to an estimated 6.4 million. Overall, IDC predicts exceptionally strong growth in all key industry metrics for the foreseeable future.

Accordingly to IDC, international markets also present significant opportunities for online brokers. While Web usage in Europe trails U.S. rates, IDC predicts Web penetration will grow faster in Europe than in the United States. Correspondingly, IDC expects Internet commerce in Europe to triple over each of the next three to four years.

We believe that the growth, both past and expected, in our core online discount brokerage business results from several fundamental factors, including:

- Further increases in the use of the Internet overall, given the accessibility to useful information, convenience, ease of use and continuously expanding resources available on the Internet;
- Increased consumer acceptance of and confidence in the Internet as a reliable, secure and cost-effective medium for financial transactions;
- The ability of online brokerage to provide individuals greater control over investing, driven by enhanced access to investment opportunities and online financial information, including research, real-time quotes, charts, new and company information;
- The appeal of online trading to value conscious investors based on its lower prices as well as a greater range of investment alternatives; and
- Growth of financial assets held by individual investors.

H.R. 1858

My testimony today will focus on Title II of H.R. 1858, which relates to improving access to securities market information databases. I will preface my remarks on Title II with a brief discussion of the manner in which securities market information currently is created, collected and disseminated.

The most important aspect of H.R. 1858 from the perspective of the Internet investor is the protection afforded and public accessibility to stock quotes. As Chairman Bliley has stated, millions of American investors depend upon these quotes for important investment decision. Congress needs to assure them access to this vital information which they themselves create through their orders. There is no place for monopolistic control over this information or for discriminatory treatment of Internet investors.

We particularly agree with the approach of H.R. 1858 in not creating any new property rights over this market information. The market information processors' actions should be reviewed by the Securities and Exchange Commission so as to reinforce the important message which H.R. 1858 sends—namely, do not impede public access to real-time stock quotes.

The Consolidated Quotation Reporting System

The collection and distribution of quotation information for equity securities is governed by Section 11A of the Securities Exchange Act of 1934 (the "Act") and the rules promulgated thereunder. Under these rules, brokers and dealers must supply their quotations to the exchanges and the NASD, which, in turn, must collect and transmit this information to information vendors on a real-time basis. These quotations are then disseminated by the vendors to the public.

The national securities exchanges and the NASD (not the brokerage firms and their customers) are the participants in the consolidated quotation system ("CQS"), and the Securities Industry Automation Corporation ("SIAC") manages the collec-

tion, processing, and dissemination of quotation information on behalf of the CQS. CQS participants derive income from the fees charged to vendors and to firms like Ameritrade which subscribe to the consolidated quotation system. In general, the revenue generated by the CQS is shared among the CQS participants based on a participant's annual share of the total number of quotations submitted by all participants.

The Consolidated Transaction Reporting System

Public transaction reporting for equity securities is also governed by Section 11A of the Act and various rules promulgated by the SEC. Under these rules, each registered exchange and the NASD must file a transaction reporting plan regarding transactions effected on its market.

The exchanges and the NASD have formed the Consolidated Tape Association ("CTA") and established the consolidated tape to disseminate last sale transaction information for trades executed on any of the participant exchanges or through NASDAQ. The CTA plan is administered by the participant exchanges, which determine policy matters and oversee operation of the system. The day-to-day operations of the consolidated tape, including the collection, processing, and dissemination of last sale transaction information, are conducted by SIAC subject to the administrative oversight of the CTA.

CTA participants derive income from the fees charged to vendors and to firms which subscribe to the consolidated tape. In general, this income is divided among these participants based on each participant's annual share of the total number of last sale transactions reported by all participants.

Obtaining Market Data

In order for a broker-dealer to receive real time quote and trade information, it must enter into subscriber agreements with the administrators of the CQS and CTA plans. These agreements require subscribers to describe how they will use the information, the type of services the subscriber will provide, and set forth the fees subscribers must pay in order to receive real time market information. These agreements also contain the terms and conditions under which subscribers may redistribute market data to customers.

Title II of the Bill

In general, we believe that market information has value to the extent that investors have the ability to utilize it in making their important trading decisions. As you know, the ability of investors to trade electronically online has enhanced their execution capability significantly. Because of the ease and speed with which customers may transact, the demand for and value of real-time market information has increased because investors now have the ability to act upon that information quickly.

We recognize in order to collect and process quote and trade information efficiently, market information processors must make considerable investments in sophisticated technology. However, we also recognize that the cost of these investments are passed along to broker-dealers like Ameritrade in the form of membership dues, transaction fees and market data fees. These fees are passed along to customers through the commissions charged for order execution.

We believe that Title II of the Bill is helpful because it provides protection for market information processors without declaring that they have proprietary rights to real time market information. In our view, this aspect of Title II is critical because that real time market information is not their property. Instead, the creation, collection and distribution of real time market information represents the collective efforts of public customers, the brokerage community and the exchanges.

This point can be clarified by analyzing the nature of quotation and transaction information. In essence, a quotation is an order that is disseminated to others and is an expression of a person's desire to trade. Under federal law, brokers and dealers must supply quotations to their exchange or the NASD, which, in turn, must collect and transmit this information to vendors on a real time basis. Thus, the creation of quotation information is not attributable to market information processors. Instead, their function is limited to collecting this information and distributing it to vendors.

The same analysis applies to transaction reports. A transaction report is a dissemination of the price at which a buyer and seller have agreed to transact. While the exchanges provide a facility for the buyers and sellers to meet, they are not involved in ensuring that buyers and sellers actually agree on a price. Thus, the creation of last sale data is attributable to the efforts of buyers and sellers, not to the efforts of market information providers, whose function is limited to reporting information generated by the efforts of others.

The exchanges and the NASD have spent a considerable amount of time and effort to develop the infrastructure necessary to facilitate transactions among market participants. Thus, it is appropriate to characterize the process of generating and distributing market data as a cooperative venture among the public, the industry and the exchanges. By clarifying that the exchanges do not have proprietary rights in real-time market information, the Bill accurately reflects the manner in which this information is created and distributed.

Congress should ensure that issues arising with respect to real time market information will continue to fall under the purview of the SEC and will continue to be subject to review under the federal antitrust laws. As the Committee knows, many serious issues exist regarding the costs associated with obtaining real time market information and the manner in which these costs are allocated. For example, the current fee structure for obtaining and redistributing real time market information is unfairly disadvantageous to online brokers such as Ameritrade. More specifically, if a customer calls a broker and asks for a real time quote on a stock, the broker is not charged for redistributing this information to the customer. Conversely, an online broker that makes available real time quote information to its customers electronically must pay a separate fee for redistributing this information.

We believe that this disparity cannot be reconciled with the Section 11A of the Securities Exchange Act of 1934, which requires that market data be available to all persons on "fair and reasonable terms" and that all persons may obtain transaction and quotation information on terms which are not "unreasonably discriminatory." The SEC recently has been encouraging market information processors to re-examine their fee structures, and these efforts have been beneficial for market participants. We favor reinforcement of the SEC's ability to exert its influence over this important matter.

We are encouraged by the Bill's clear expression of the government's continued antitrust authority in the area of real time market information. As *exclusive* processors, the CQS and CTA have a monopoly on the collection and distribution of real time market information. Further, because these organizations are governed solely by the exchanges and the NASD, this situation is not like to change in the near future.

To the extent that the fees charged for access to real time market information are not strictly cost-based and nondiscriminatory, these fees unnecessarily raise the cost of market access for investors. Thus, we believe that the Bill's antitrust provisions will guard against the potential for abuse of market power by the exclusive processors.

NASDAQ/Amex and NYSE "Online Investor" Quotation Access Fees

We would like to clear up an apparent misconception about Exchange and NASDAQ access fees charged online investors for quotation information. The fees do apply to online investors, not the broker as suggested in the May 20 Congressional Record at page E-1056. Indeed when one of our customers calls on the telephone for quotations no fee is charged. Only when an investor receives the information more efficiently through our website or direct online connection is an investor access fee charged.

Thus NYSE and Nasdaq/Amex non-professional access fees are charged to investors that access quotation and/or trade report information online or electronically. Investors that access such information from their broker by telephone are not charged such a fee. We believe that this is a *per se* discriminatory practice. As a policy matter, fees for access to quotations should not be applied to investors, investing for their own account and not re-disseminating the information or otherwise using it for commercial purposes. If such fees are charged, then they should be charged to all investors, with differential charges supported by differential costs of the exclusive processor.

It is true that, intense service competition among online brokers finds the broker paying customers' quotation access fees for active accounts; and indeed for all customers just before an order is submitted for execution, the market quotation is provided. This merely shifts the discrimination from the customer to the broker.

Until the NASD instituted a temporary 50% reduction in the NASDAQ fee, the combined fees were \$14.50 per month (\$5.25 for NYSE, \$4.00 for Nasdaq, and \$3.25 for Amex); or an alternative of 1 cent per item (i.e. bid price, offer price, last trade price etc.). While the size of a discriminatory fee or tariff is irrelevant (i.e. it should be abolished), the fees are large to small investors. A typical online investor executes about 1 trade per month and pays a commission between \$10 and \$20 per trade. Thus, the monthly fees are a large component of the typical investor's costs.

The level of fees is another matter. Clearly the actions of the exclusive processors in cutting fees when the House and Senate Committees started their inquiries indi-

cate that the fees, in addition to being discriminatory, substantially exceeded the exclusive processor's costs. HR 1858 would not affect the ability of exclusive processors to single out investors that access quotation information online or electronically for access fees.

Fees for information should be charged; they just should not be discriminatory as between equivalent users when viewed from the standpoint of impact on exclusive processor costs.

Significance of Ensuring Access by the Public to this Data

Access by the public to real time quotations and trade information affects the pricing efficiency of the market and all of the valuation of assets that are determined by the bid/offer and trade prices. It also affects the regulation of the markets because an important aspect of market regulation is the self-policing mechanism of customers watching market data around the time of their own transactions.

As Chairman Bliley has said, responsible decisions respecting the pricing and entry of investor orders cannot be made without access to the real-time best bid and ask prices in the particular security at the time a transaction is contemplated. Brokers have always been in the business of apprising their customers of market conditions when orders are being priced. Market information has been provided to customers, using the technology of the times. The ticker tapes, a prime example of that process, continue to this day.

The CNBC ticker illustrates the desire of the public for information and the desire of markets to advertise their listing value to issuers. Coincidentally, it illustrates some of the differential costs for access noted earlier. Investors and the public generally can receive free real time trade reports from the CNBC ticker, but if they receive those same trade reports over their broker's website they would have to pay monthly NASDAQ/NYSE fees.

Ironically, a customer in the early 1970's could be on the telephone with his broker who was viewing a quotation machine and on the second line with a marketmaker giving the customer an instantaneous execution against the best available published quotation. Thus, the investor had free telephone access to competitive quotations at time of placing an order. This is still true.

In contrast, in 1999, a customer sitting at a computer, connected to the broker's website that contains continually updated quotation information, may need to enter an order to receive a real time quotation. When an inquiry is made for quotations or to place an order the inactive customer might not receive a real time quotation until an order has actually been submitted to the broker's system. The system will then flash a real time quotation; the customer will change the order, based on the new information, and click re-submit to enter the order.

If the customer's NASDAQ and NYSE subscriber fee is paid or is being automatically assumed by the broker, the tollgate is open and quotation information will appear on the screen the first time and the order will be correctly composed the first time. If the tollgate is not open the information process is temporarily obstructed to minimize the information cost being absorbed by the broker to transaction situations.

Thus, competition will optimize economic access to information for any given set of circumstances. Unnecessary costs and/or restraints on competition will reduce that access and negatively impact the efficiency of the market. Therefore, the real question in this legislation is does it raise or lower costs or investor access to information directly; or by its effect on competition does it indirectly affect future costs and access?

By definition exclusive processors are monopolies. If their fees are not strictly cost-based and non-discriminatory, then they affect competition and the cost of access. Moreover, if they are insulated from future competition that technological change might produce then access to information and market efficiency are seriously compromised.

Extent of Use of This Data for Online Securities Trading

Over 75% of Ameritrade customers update portfolio values, obtain quotation information, and/or execute trades online. For transaction purposes, data that is not real time is almost worthless. Therefore having uncontaminated information and unobstructed access to such information is essential.

Moreover, the competitive process is rapidly increasing the use of the information as technology makes the information more readily available on a real time basis. More important, data access costs affect customer usage of the information and the efficiency of customer transaction activities.

The Securities and Exchange Commission recognized this when granting accelerated approval to NASD's 50% cut in online investor quotation access fees:

"Recent technological developments have allowed vendors to provide their customers with more efficient and cost effective methods of executing securities transactions. The Commission expects that by reducing market data access fees the investor will further benefit by a reduction in costs of executing these transactions. For the investor to make sound, financial decisions, efficient and inexpensive access to market data information is vital. Thus, the Commission believes that reducing the market data fees by 50% should enhance investor access and may encourage increased investor participation in the securities markets."¹

With the number of investors shifting to online activities growing rapidly, online usage of real time information is certain to continue to grow rapidly and become the choice of a large share of the investing public. Thus, the potential exists for even small differentials in per unit charges to affect activity and alternatively to generate huge surpluses for participants like exclusive processors that are protected by regulation from competition.

Therefore, while information costs should be covered, differences in fees that are charged to similarly situated participants should be cost-based.

The Implications of Creating a Property Right over this Data for any Entity, including Stock Exchanges

Absent artificial restraints, competition will assure that quotations are published and communicated to public investors over the Internet and securities information systems. However, it is impossible for anyone to predict how competitive forces will re-configure the future structure of information flows.

For example, will the quotations continue to flow to a central processor, a single point of failure, or will each trade executing entity be linked with every other through Internet linkages, with no vulnerability to outages at particular quotation and execution centers?

Property rights should be protected but not created by government. When government action creates value through regulation of others, then there should be no protection beyond the need to recover costs of regulation. With regard to securities information there are the following considerations:

- Exclusive processor contracts with market participants require them to give up all proprietary rights to quotation and trade report information input into exclusive processor systems. This prevents, unnecessarily, the potential for competition in the combination of such information and generation of best bid/offer and ticker tape information. It also may prevent marketmakers and other execution centers from publishing competing quotations on websites that include each others quotations received over Internet linkages. HR 1858 apparently would leave such restraints on competition in place.
- As provided by Title I for other databases, government databases commonly are not protected by copyright equivalent protections. Rather such databases are considered to be proprietary (not public) or part of the public domain.
- Investor orders and trades and proprietary quotations of marketmakers and specialists are the original source of quotation and trade report information combined into the level 1 stream commonly accessed by public investors. Costs are incurred in the production of the information over and above the pure byproduct costs of executing trades or complying with necessary regulation. Market data information values should not just be transferred from private to the public domain by regulation; nor should it be captured solely by or for the benefit of government created exclusive processors.
- Legitimate property rights of producers of information should be exercisable and recognized by processors in cost covering licensing arrangements between information processors and producers either through competitive forces or through regulation of revenue sharing and cost allocations of not-for-profit exclusive processors. Currently, exclusive processors appear to be for profit entities; they are not user-controlled; and information is extracted from participants through the regulatory process and resold without recognition of participant property rights.
- For example, NASD'S OATS (Order Audit Trail System) requires the reporting of every single event associated with the processing of an order from entry to completion; trade reporting is motivated by issuer desires for a visible market for shares as well as investor needs. Similarly, much of the trade report, and quotation regulations require brokers and marketmakers to incur costs that would not otherwise be incurred. It is not always clear which of these costs are for broker/dealer and market surveillance regulation. Some of these costs are

¹ See SEC Release No. 34-41499, File No. SR-NASD-99-25.

regulatory; but the data have a market value and are sold to subscribers. Nonetheless, the producers of the information do not share in the revenues to help pay the costs. Indeed, online investors pay twice for market data: once in commissions and once in access fees.

- Beneficiaries of the market prices data system include issuers and many non-investor groups that use the information for pricing of portfolios, economic analysis, financial research, investment advice, media publication, etc. Also, a vast shareholding public, beyond active direct investors, benefit from the regulatory apparatus that requires the creation of quotation and trade price information for market surveillance. Protection of property rights of original producers and those who combine and modify the information is desirable to capture from non-participant groups the market value of the information. Title II of HR 1858 would provide copyright equivalent protection to exclusive processors, which might otherwise not be covered by government database exemptions.
- However, competitive forces that might exert property rights of the original producers are squelched by exclusive processor contracts. Title II is intended to permit the independent creation of databases; but contracts preclude just that. Such contractual restrictions are anti-competitive and should be removed.
- The above considerations would suggest that property rights or the equivalent should only be granted, if the system is user-controlled, cost based, not-for-profit and has appropriate provisions for cross licensing and revenue sharing among data producers. All that should be protected is the combination of information into the best bid/offer and last sale stream, with competitors permitted to compete in performing that function if such competition emerges.
- Quotations have always been provided free by marketmakers to clients. The SEC has said that it considers the NBBO (National Best Bid/Offer) to be part of marketmakers' quotes for trade execution purposes. It is not clear whether SEC policy places NBBO quotations in the public domain, permitting marketmakers to provide their quotations, modified by the NBBO, free to clients over websites or whether exclusive processor contract provisions prevent such free dissemination of quotations. Legislation of property rights or their equivalent may be ill advised because rapidly changing market processes form such a tangled web of information processes that only competitive forces can efficiently rearrange service, revenue and cost issues.

Disclosure of the Revenue and Costs of Exclusive Processor Market Data Activities

Exclusive processors are not subject to the pervasive "utility" type regulation as intended by Congress. Congress did not intend that NASDAQ and NYSE would reap surpluses, from quotation access charges imposed upon small investors for access to quotation information. Both houses of Congress expressed a clear intent² that the monopoly power of SRO exclusive information processors, which might result from the formation of the National Market System (NMS), should be subjected to exhaustive "utility" type review. Regulation has not resulted in the production and disclosure of detailed, audited fee revenues and/or the related direct and allocated costs to support the specific fees. Nor have analyses been placed in the public record to justify differential application of fees to online investors.

Large fee cuts made by NASDAQ and proposed by NYSE when Congressional interest surfaced indicate the probable existence of unsupportable surpluses and fees that are not reasonable.

Financial statements of SROs are published only annually and in insufficient detail to evaluate fee revenues. Also fee submissions, as described in SEC releases, contain little information respecting the underlying costs and planned uses of the revenues. Fee changes are usually approved on an accelerated basis even though SROs have not sought comments from the public or members respecting proposed fees. Moreover, fees though inter-related are generally changed piecemeal, precluding any evaluation of the structure of exclusive processor fees.

Details of contracts for last sale prices now broadcast over TV on a real-time basis are not part of the public record. Is the implicit per customer per item charge in those contracts equivalent to the ½ and 1 cent per item per viewer access charge imposed on online customers by NASD and NYSE respectively?

No cost and benefit analyses are performed or available in the public file. For example, for online investor access fees, broker administrative costs are burdensome to keep track of customers' (subscribers') use of information. Similarly, there is no analysis of the negative impacts of the fees on market pricing efficiency, and no

²See Legislative History of Securities Acts Amendments of 1975, House Committee on Interstate and Foreign Commerce, May 1975, p.93. See also House Conference Report No. 94-229, May 19, 1975, p.93.

analysis of the anti-competitive impact of the differential application of fees to on-line investors.

Fees are not unbundled and there is no public analysis of this issue. A typical investor accesses on average less than 10 NYSE and 10 NASDAQ stocks per day out of the 18,500 stocks quoted by Knight/Trimark Securities Inc. Some may access only last trade; sellers may want only the bid price; buyers may need only the offer price. Some may want to access only selected groups of stocks pre-determined by them. Unbundling is important because the ½ cent and 1 cent charges are on a per item basis.

Policy Problems

Surpluses are used to finance unrelated activities of NYSE and NASDAQ such as investment in Optimark, purchase of Amex, markets in Japan, New Zealand, and the like.

Original producers of the information have been prevented from exerting copyright claims. They should be permitted to exert those claims in the market data process.

Market data process needs to be insulated from profit incentive of the exclusive processors. NMS Market data activities appear to be regarded as profit centers for the respective SROs. Indeed ECNs are lining up to become exchanges in order to share in the surpluses. Producers of information should share in revenues but exclusive processor should be a user controlled non-profit activity.

Congress must not allow this monopoly. In the tradition of our nation, Congress should foster competition and free enterprise. This will allow systems to evolve relative to market demand adding strength, depth and liquidity to our market systems.

For the benefit of investors and our markets, execution systems must compete or be allowed to compete; processors of securities data must be allowed to compete. Investors need a choice.

Brokers must be allowed to distribute real time quotes allowing investors access to market data in a system allowing for the lowest possible costs.

HR 1858 must remain consistent with the law establishing a national market system for securities and use the free markets for establishing efficiency in buying and selling securities. Information flow must be non-discriminatory.

Any legislation should encourage the development of the national market for on-line investing because of the benefits to securities markets of such investing—more volume, greater liquidity and depth.

Mr. OXLEY. Thank you very much, Mr. Ricketts.

Our next witness is Mr. Stuart Bell from Bloomberg Financial Markets. Welcome, Mr. Bell.

STATEMENT OF STUART BELL

Mr. BELL. Thank you. Mr. Chairman and members of the subcommittee, my name is Stuart Bell and I am pleased to testify on behalf of Bloomberg Financial Markets in support of H.R. 1858, the Consumer and Investor Access to Information Act of 1999. Bloomberg Financial Markets provides multimedia analytical, and news services to more than 117,000 terminals used by 315,000 financial professionals in 100 countries worldwide. Our clients include most of the world's central banks as well as investment institutions, commercial banks, and U.S. Government offices and agencies. Bloomberg News is syndicated in over 900 newspapers and on 550 radio and television stations. Bloomberg publishes seven magazines around the world and Bloomberg Press publishes books on financial subjects for investment professionals and nonprofessional readers.

In a very real sense, the heart of the Bloomberg enterprise is the data collection facility that I head in Princeton, New Jersey. At that facility, Bloomberg is constantly collecting and analyzing data for nearly 5 million securities as well as other financial instruments across all markets worldwide. A staff of more than 1,000 data professionals maintain the Bloomberg database which is the

most comprehensive, timely, and accurate financial database available.

We live in what is aptly called the information age. Clearly, the basic information policy of our country has served us extremely well. Historically, that policy has held that facts, the building blocks of the information products, cannot be monopolized. The House Judiciary Committee has proposed legislation that would fundamentally change this policy. Though well intentioned, the Judiciary Committee's proposal would create a quasi-property right in facts themselves granting the compiler of information an unprecedented right to control transformative value-added downstream uses of the resulting collection.

Bloomberg's data profession has culled information from thousands of sources to create products with significant value added. Much of this data is simply factual information from the public domain. In analyzing whether we must seek permission to use data to create value-added products, Bloomberg conducts the analysis used by all database producers.

Are we utilizing facts or someone's original selection or arrangement of facts? Facts have always been in the public domain, whereas the original selection, an arrangement of facts, is copyrightable. Under the House Judiciary Committee's approach, this analysis would provide no comfort. Bloomberg would have to assume that virtually all collections of data produced by private parties are proprietary.

Had this legal regime been in place when Bloomberg was launched in the early 1980's, it is unlikely Bloomberg would have become the significant news and information provider it is today.

By contrast, the bipartisan leadership of the House Commerce Committee has crafted legislation that provides an additional enforcement tool for database producers while assuring the consumers and investors have continued access to factual information. This is particularly critical for the continued growth of the financial markets.

It was not so long ago that a consumer couldn't get a quote on a stock or a bond without calling a broker. Ascertaining the differences in prices offered and commissions charged by different brokers was extremely difficult. By empowering investors with information, Bloomberg Financial Markets played a major role in accelerating a movement toward more transparent, efficient, and publicly accessible financial markets.

We believe that the Commerce Committee legislation will permit consumers and investors to remain in power by assuring them access to the currency of the age, namely information. In a press release I have attached to my testimony, PriceScan co-founder Jeffrey Trester speaks eloquently to this process of information empowering consumers and to Mike Bloomberg's visionary role in transforming financial markets.

PriceScan provides an online search engine to allow consumers access to comparative prices for and product information on computer goods. PriceScan hopes ultimately to provide this information for all consumer goods.

We need to be sure that any legislation Congress enacts nurtures rather than impedes the many young entrepreneurs poised at this

moment to transform market in revolutionary ways for the vast benefit of consumers. Your legislation meets that rigorous test of significantly advancing and protecting the interests of consumers and investors. We believe the new enforcement tools provided by the Commerce Committee bill as drafted coupled with technological protections and copyright law will provide ample protection for database creators without chilling transformative uses and innovation in the field of financial information services.

In conclusion, databases are both items of commerce in their own right and critical tools for facilitating broader commerce. Given the crucial role of information, not only to our economic lives but also to every aspect of our lives, it is imperative that the legislation in this area strikes a fine balance.

The bipartisan leadership of the Commerce Committee and your very capable staffs should be commended for crafting legislation that does exactly that. We applaud your efforts and look forward to working with you as this process continues.

[The prepared statement of Stuart Bell follows:]

PREPARED STATEMENT OF STUART BELL ON BEHALF OF BLOOMBERG FINANCIAL MARKETS

Introduction: Mr. Chairman and Members of the Subcommittee. My name is Stuart Bell, and I am pleased to testify on behalf of Bloomberg Financial Markets in support of H.R. 1858, the "Consumer and Investor Access to Information Act of 1999."

Bloomberg Financial Markets provides multimedia, analytical and news services to more than 117,000 terminals used by 350,000 financial professionals in 100 countries worldwide. Our clients include most of the world's central banks, as well as investment institutions, commercial banks, and U.S. government offices and agencies. Bloomberg News is syndicated in over 900 newspapers, and on 550 radio and television stations. Bloomberg publishes 7 magazines around the world. Bloomberg Press publishes books on financial subjects for the investment professional and non-professional reader.

Bloomberg Financial Markets is headquartered in New York City with 10 sales offices and 80 news bureaus around the world. In a very real sense, however, the heart of the Bloomberg enterprise is the data collection facility I head in Princeton, New Jersey. At that facility, Bloomberg is constantly collecting and analyzing data for nearly 5 million securities, as well as other financial instruments, across all markets worldwide. A staff of more than 1,000 data professionals maintains the Bloomberg database, which is the most comprehensive, timely, and accurate financial database available.

We live in what is aptly called the "Information Age." Last week, the Commerce Department released a report showing that the information technology industry generated at least a third of the nation's economic growth between 1995 and 1998. A week before that, the University of Texas released a study showing that, in 1998, a mere five years after the introduction of the World Wide Web, the Internet generated more than \$300 billion in revenue. These improvements in technology and hence productivity form the foundation of the robust economy that has benefitted so many Americans.

Clearly the basic information policy of our country has served us extremely well. Historically that policy has held that facts—the building blocks of all information products—cannot be monopolized.

House Judiciary Committee approach: The House Judiciary Committee has proposed legislation that would fundamentally change this policy. Though well-intentioned, the Judiciary Committee's proposal would create a quasi-property right in facts themselves, granting the compiler of information an unprecedented right to control transformative, value-added, downstream uses of the resulting collection.

Some have characterized this as placing "toll booths" on the information superhighway. In fact, given the absence of a compulsory license scheme, this approach would constitute a "toll booth" if you are lucky, a costly detour leading to a dead-end if you are not.

Bloomberg's data professionals cull information from thousands of sources to create products with significant value-added. Much of this data is simply factual infor-

mation in the public domain. In analyzing whether we must seek permission to use data to create value-added products, Bloomberg conducts the analysis used by all database producers: Are we utilizing facts or someone's original selection or arrangement of facts? Facts have always been in the public domain, whereas the original selection and arrangement of facts is copyrightable.

Under the House Judiciary Committee's approach this analysis would provide no comfort. Bloomberg would have to assume virtually all collections of data produced by private parties are proprietary. Had this legal regime been in place when Bloomberg was launched in the early 1980s, it is unlikely Bloomberg would have become the significant news and information provider it is today.

House Commerce Committee approach: By contrast, the bi-partisan leadership of the House Commerce Committee has crafted legislation that provides an additional enforcement tool for database producers while assuring that consumers and investors have continued access to factual information.

This is particularly critical for the continued growth of the financial markets. It was not so long ago that a consumer couldn't get a quote on a stock or a bond without calling a broker. Ascertaining the difference in prices offered and commissions charged by different brokers was extremely difficult.

By empowering investors with information, Bloomberg Financial Markets played a major role in accelerating the movement toward more transparent, efficient and publicly accessible financial markets. We believe the Commerce Committee legislation will permit consumers and investors to remain empowered by assuring them access to the currency of the age—namely information.

In a press release I have attached to my testimony, PriceScan co-founder, Jeffrey Trester, speaks eloquently to this process of information empowering consumers and to Mike Bloomberg's visionary role in transforming financial markets. PriceScan provides an on-line search engine to allow consumers access to comparative prices for and product information on computer goods. PriceScan hopes ultimately to provide this information for all consumer goods.

We need to be sure that any legislation Congress enacts nurtures—rather than impedes—the many young entrepreneurs poised at this moment to transform markets in revolutionary ways for the vast benefit of consumers. Your legislation meets that rigorous test of significantly advancing and protecting the interests of consumers and investors.

I would like to respond to a few criticisms of the Commerce Committee legislation. Some have argued that an SEC enforced law should not preempt state laws in policing the misappropriation of real-time market information provision of H.R. 1858. As a business that gathers market information from every state in the Union, we are convinced the SEC should retain the authority to enforce national standards. Congress should not create the prospect of 50 different standards for addressing the misappropriation of real-time market information that is distributed nationally.

Additionally, some have argued that the legislation should provide undefined additional remedies for unauthorized sharing of real-time market information. As a business that pays millions of dollars annually for real-time market information, it is certainly in our interest to curtail unauthorized sharing of real-time market information. However, in our own broad experience as both a user of data created or collected by others and a creator and provider of our own value-added databases, Bloomberg has found existing enforcement tools to be sufficient to combat unauthorized use of databases.

We believe the new enforcement tools provided by the Commerce Committee bill, as drafted, coupled with technological protections and copyright law—which protects creative expression as well as the creative arrangement and selection of data—and contractual arrangements—which limit the use customers can make of databases—will provide ample protection for database creators without chilling transformative uses and innovation in the field of financial information services.

Conclusion: In conclusion, databases are both items of commerce in their own right and critical tools for facilitating broader commerce. Given the crucial role of information, not only to our economic lives, but also to every aspect of our lives, it is imperative that legislation in this area strikes a fine balance.

The bipartisan leadership of the Commerce Committee and your very capable staffs should be commended for crafting legislation that does exactly that. The Commerce Committee bill protects both the incentives to compile important information and the right of the public to access that information. We applaud your efforts and look forward to working with you as this process continues.

Mr. OXLEY. Thank you, Mr. Bell.

Our next witness is Dean Furbush, National Association of Securities Dealers. Welcome, Mr. Furbush.

STATEMENT OF S. DEAN FURBUSH

Mr. FURBUSH. Thank you. I am Dean Furbush, senior vice president and chief economist of the NASD, which runs the Nasdaq Stock Market and the American Stock Exchange. Perhaps you get inured to this after you do it a few times, but it is been infrequent enough for me that I take pride in representing my organization at this venue. I hope that I can be helpful today and following today, if there are further questions.

A fundamental tenet of U.S. Securities regulation is disclosure. The manifestation of this for securities trading is found in transparent and widespread availability of quote and trade information. The success of financial markets, of market participants, and particularly of individual investors relies largely on the accuracy, the reliability, and the integrity of these market data that go out to investors. Without that, of course, today's trading couldn't occur.

The NASD seeks to provide market data as widely and simply as possible without compromising Nasdaq's and AmEx's rights in the information. We continually reevaluate our market data policies and pricing to ensure that this goal is achieved.

Revenue from the sale of real-time market data allows us to operate our markets, to regulate our markets and members in order to confirm the integrity of the quotes and trades that we send out, to police online trades, and to ensure the qualifications of the companies listed on our markets. Market data revenue also contributes to the funding of one of the largest private communications networks in the world which supports the Nasdaq stock market. Those factors are the very ones that give the market data their accuracy, their reliability and their integrity, and thus their value. Our real-time market data is an information product. It is the outcome of the entirety of the NASD operations. For these reasons, of course, we believe that heightened protection from misappropriation of real-time market data benefits every investor and is properly the subject of legislative action such as that before us today which we fundamentally support.

There have been several characterizations, implicit and explicit, as to the effect of this bill on property rights. It is our understanding that with great intent this bill is essentially silent on that topic and neither adds to nor detracts from the current situation with respect to the property rights of these data.

The need for a Federal misappropriation statute to protect market data is obvious when considering competition with Europe, the Supreme Court's holding in the Feist case, the patchwork of State misappropriation laws, the inability to use a contract against someone not a party to it, and the clumsiness of technological protections. We, therefore, welcome this opportunity to work with the subcommittee and offer our suggested changes to H.R. 1858.

We share the laudable goals of title II of the bill, to provide investors with continued access to market data while protecting the markets from misappropriation. We have limited our remarks to title II, but I want to note that we share the concerns regarding title I expressed to the committee by the Coalition Against database Piracy.

I would like to just highlight four changes that we recommend in the bill's provisions. The first change is the definition of market

information processor should include everyone in the business of disseminating market data. The current definition is limited to markets only, which is unfair.

The second change is to provide the SEC with the flexibility to address changing competitive conditions in the market for market data.

The third change is to maintain in instances of misappropriation a choice of causes of action by the market information supplier so that pirates cannot escape liability simply because a contract is dismissed on a technicality.

And the fourth change is to modify the preemption clause so that causes of action other than misappropriation are maintained.

To finish up, Mr. Chairman, we support enactment of this bill because the old protections don't work in the new Internet age and due to the changes in Europe. Thank you for the opportunity to testify, and I'm available for questions now or later.

[The prepared statement of S. Dean Furbush follows:]

PREPARED STATEMENT OF DEAN FURBUSH, CHIEF ECONOMIST AND SENIOR VICE PRESIDENT, NATIONAL ASSOCIATION OF SECURITIES DEALERS, INC.

I am Dean Furbush, Chief Economist and Senior Vice President of the National Association of Securities Dealers.

The NASD would like to thank the Subcommittee for this opportunity to testify on market data and specifically how Title II of HR 1858, the Consumer Access to Information Act of 1999, could affect investors and the securities markets. More particularly, the Subcommittee's invitation to testify today requested that we provide our views on why the financial markets require new protective rights of stock quote information, the significance of ensuring access to the public of this data, and the costs and transparency of such information. We are pleased to comply with that request.

THE NASD

Let me briefly outline the role of the NASD in the regulation and operation of our securities markets. Established under authority granted by the 1938 Maloney Act Amendments to the Securities Exchange Act of 1934, the NASD is the largest self-regulatory organization for the securities industry in the world. Virtually every broker-dealer in the U.S. that conducts a securities business with the public is required by law to be a member of the NASD. The NASD's membership comprises 5,600 securities firms that operate in excess of 66,000 branch offices and employ more than 569,000 registered securities professionals.

The NASD is the parent company of The Nasdaq Stock Market, Inc., the American Stock Exchange, and NASD Regulation, Inc. (NASDR). These wholly owned subsidiaries operate under delegated authority from the parent, which retains overall responsibility for ensuring that the organization's statutory and self-regulatory functions and obligations are fulfilled. The NASD is governed by a 27-member Board of Governors, a majority of whom are non-securities industry affiliated. Board members are drawn from leaders of industry, academia, and the public. Among many other responsibilities, the Board, through a series of standing and select committees, monitors trends in the industry and promulgates rules, guidelines, and policies to protect investors and ensure market integrity.

The Nasdaq Stock Market

The Nasdaq Stock Market is the largest electronic, screen-based market in the world, capable of handling trading levels of at least one and a half billion shares a day. Founded in 1971, Nasdaq today accounts for more than one-half of all equity shares traded in the nation and is the largest stock market in the world in terms of the dollar value of trading. It lists the securities of 5,100 domestic and foreign companies, more than all other U.S. stock markets combined.

The American Stock Exchange

The American Stock Exchange is the nation's second largest floor-based securities exchange and is the only U.S. securities exchange that is both a primary market for listed equity securities as well as a market for equity options, index options, and

equity derivatives. Amex has been the nation's foremost innovator in structured derivative securities and index share securities. The latter are registered investment companies that permit an indexed equity investment, as do index mutual funds, but afford investors the opportunity to purchase or sell on the Exchange at any time during the trading day.

NASD Regulation

NASD Regulation is responsible for the registration, education, testing, and examination of member firms and their employees. In addition, it oversees and regulates our members' market-making activities and trading practices in securities, including those that are listed on the Nasdaq Stock Market and those that are not listed on any exchange.

NASDR carries out its mandate from its Washington headquarters and 14 district offices located in major cities throughout the country. Through close cooperation with federal and state authorities and other self-regulators, overlap and duplication is minimized, freeing governmental resources to focus on other areas of securities regulation.

NASDR has examination responsibilities for all of its 5,600 members. In addition to special cause investigations that address customer complaints and terminations of brokers for regulatory reasons, NASDR conducts a comprehensive routine cycle examination program.

MARKET DATA

A critical component of the success of the Nasdaq Stock Market and the Amex is the integrity and wide spread availability of information that we provide about quotations and trading activity. A fundamental tenet of securities regulation is disclosure and the hallmark of the securities markets in the US is transparency of quotes and trades. The success of the financial markets, vendors, and particularly individual investors, relies largely on the information we provide about trading activity. Without accurate and real time access to information about changes in stock prices, today's trading would be impossible. Nasdaq and Amex and the trading of the companies that list on these markets could grind to a halt. We operate in a global marketplace where the integrity, reliability, and accuracy of our data are essential to the economy and society as a whole. We are firmly committed to ensuring the widest access to our market data. We continually reevaluate our existing market data policies and pricing to ensure that this goal is achieved. We feel strongly that a federal law to supplement the existing protection for databases is not only beneficial, but necessary, for the continued general availability of information that is essential to the lives and livelihoods of millions in this country and around the world.

The NASD seeks to provide market data as widely and simply as possible without destroying Nasdaq's and Amex's rights in the information. The revenue obtained from the sale of real time market data is vital to the integrity and continued operation of the markets. Nasdaq has never charged for delayed data, but in return, it requires strong protection for real time data because of the limited time in which it can be used. The revenues from market data allow us to surveil and regulate our markets and members to confirm the integrity of the quotes, to police on-line trades, supervise member conduct, and ensure the qualifications of the companies listed on the market. It also contributes to the funding of one of the largest private communications networks in the world. Our real time market data is the product of everything that stands behind the Nasdaq and Amex markets. It is those factors that give the market data value and integrity. For these reasons, we believe that heightened protection from misappropriation of real time market data benefits every investor trading in companies listed on the market and should be the subject of legislative action.

THE NEED TO PROTECT MARKET INFORMATION AND OTHER DATABASES

The NASD has previously urged Congress to adopt enhanced protection for market data and other databases because of both international and domestic developments in this area. The advent of the Internet and the huge increases in on-line trading have increased the possibility of market data misappropriation and greatly magnified the ensuing potential damage from unauthorized dissemination.

Competition with Europe—The financial marketplace is competitive and global. In fact, Nasdaq has recently announced joint ventures to expand trading in Asia and to explore options in Europe to provide greatly enhanced access for US listed companies to foreign capital. As extended trading hours become a reality and the world moves to seamless 24 hour trading the impact of the European Directive on real time data becomes greater. As the need for information grows in all parts of the

world and technology makes it easier to deliver information across borders, other nations will seek to take over our lead in market data. Nowhere is the threat to the American database industry more evident than in Europe.

The European Union's *Directive on the legal protection of databases* ("EU Directive"), adopted in March 1996, went into effect on January 1, 1998, and is being implemented by EU member states. Most of our major European trading partners have enacted their own national laws to implement the EU Directive.

The EU Directive was designed to promote increasing investment in Europe's database industry, in the hope of overcoming its shortcomings in competition with U.S. industry.¹ The chosen means for achieving this is the law's reciprocity provisions. The EU Directive requires that each EU member extend protection to all databases produced in any EU country. However, it does not extend similar protection to database producers in non-EU nations, unless the database company has a significant physical presence in an EU country² or unless their home country offers comparable protection to EU database producers.³ While some have advocated that no database protection is needed, since companies could move to Europe to obtain this protection, we do not believe that Congress would want to promote the movement of US jobs overseas.

Since the United States produces by far the majority of the world's databases, the incentives in the EU Directive to increase investment in Europe's database industry, combined with a reciprocity provision, may soon be interpreted as a free rein to misappropriate by unscrupulous European competitors. Without U.S. database legislation, American data providers will receive no protection if their products and services are stolen by European competitors and marketed against them—whether pirated copies appear in Europe, the United States or elsewhere in the world. Enactment of a U.S. law to protect databases would thwart this strategy.

Enhanced US Protection—Apart from the concerns that Nasdaq and Amex have about developments internationally, there is a compelling need to enact federal legislation to establish adequate protection for databases.

Today, the database industry is faced with an intolerable situation under domestic copyright law. Legal protection for databases—essential to foster their development and dissemination—changed dramatically with the Supreme Court's decision in *Feist Publications v. Rural Telephone Service Co.*, 499 U.S. 340 (1991). Prior to *Feist*, producers believed their databases to be entitled to copyright protection under the "sweat of the brow" doctrine. As noted in the 1998 Report on Legal Protection for Databases prepared by the U.S. Copyright Office, this doctrine was used by many courts to "prevent the copier from competing unfairly with the compiler by appropriating the fruits of the compiler's efforts or creativity. In this sense, courts treated copyright protection for compilations much like a branch of unfair competition law."⁴

In addition to eliminating the sweat of the brow doctrine, *Feist* clarified that "originality" forms the linchpin of copyright protection in compilations. Even where sufficient originality exists for protection, its scope is thin because it extends only to the original selection, arrangement and coordination of the database. Therefore, the factual contents of the database are not protectable and may be copied with impunity. These pronouncements in *Feist* significantly altered the legal landscape for database producers. The conclusion reached by the Copyright Office bears special emphasis:

Consistent with *Feist's* pronouncement that copyright affords compilations only 'thin' protection, most of the post-*Feist* appellate cases have found wholesale takings from copyrightable compilations to be non-infringing. This trend is carrying through to district courts as well."⁵

Thus, in sharp contrast to the situation before *Feist*, the database industry today can count on only limited protection for databases. A database qualifies for copyright protection only if the information it contains is selected, coordinated or arranged in a manner that expresses originality. Increasingly, databases whose producers attempt to meet the growing market demand for comprehensive, logically organized collections of information—like the Nasdaq stock market reports—risk fall-

¹ Directive 96/9/EC of the European Parliament and of the Council of the European Union of 11 March 1996 on the legal protection of databases, Recitals (7), (10) and (12).

² Recital (11). See also, *EU Directive*, Art. 11(1) and (2).

³ *Id.* at Art. 11(3): ("Agreements extending the right...to databases made in third countries...shall be concluded by the [European] Council..." and Recital (56), which notes that protection in Europe "should" be granted to other nations' databases only if those nations "offer comparable protection to databases produced by [EU] nationals...")

⁴ U.S. Copyright Office, *Report on Legal Protection for Databases*, August 1997, at 5 [hereinafter *Copyright Office Report*].

⁵ *Id.*, at 17-18.

ing short of the originality standard, at least as it is applied in some circuits. Even if a database qualifies for copyright protection, the courts have refused to stop wholesale copying of the information they contain. In some cases, the courts have held that the entire product may be replicated with abandon by others, including unscrupulous competitors looking to make a quick profit by charging for what they have not produced.⁶ Alternatively, there has been evidence of "cyberpranksters," such as those described in *United States v. LaMacchia*, 871 F. Supp. 535 (D. Mass. 1994) who copy and disseminate databases via the Internet without a profit motive, although the resulting harm to database providers remains.

The weakness of copyright law leaves database producers with only a few important, but limited, possible legal means of protecting their investment of money, hard work, and effort. None of these offer the general protection that H.R. 1858, consistent with our suggested changes, would provide. I will comment on three of the methods that Nasdaq must resort to absent federal statutory protection.

Misappropriation

In the absence of federal legislation, the markets will be left with a variety of state laws and judicial doctrines that are lumped under the heading of misappropriation and unfair competition. However, these state law doctrines suffer inevitably from a lack of national uniformity. As the Copyright Office Report noted, misappropriation is "somewhat ill-defined and uncertain in scope."⁷ Further, it is not available in all states—a big disadvantage in today's global database market. Certainly in terms of the Nasdaq database, whose value is primarily in its timeliness, this is an important form of protection and one on which we rely wherever possible.

Moreover, claims by critics of database protection legislation are off the mark when they say that the 1997 decision of the Second Circuit in *National Basketball Association v. Motorola, Inc.*, 105 F.3d 841 (2d Cir. 1997), shows that misappropriation doctrine serves the purpose instead. Under the Second Circuit's opinion the misappropriation defense can be invoked only if the information taken is "time-sensitive" and only if the data pirate is "in direct competition with a product or service offered."⁸ Many valuable databases contain information that is not "time-sensitive"—or that is even historical in nature. Further, as the *LaMacchia* decision demonstrated, the commercial value of a work can be seriously undermined even if misappropriated by someone other than a competitor and not for any commercial purpose.

Contract Law

Another crucial protection that Nasdaq relies on is contract law. It is an important component of any adequate legal regime, but it has its shortcomings. Opponents of database protection contend that information providers can simply rely on contract to control misuse, but the most obvious defect in that argument is that you cannot enforce a contract against someone who is not a party to it. Once the information is accessed and used by someone not bound by the contract, any contractual control over misuse is lost irrevocably.

Moreover, like misappropriation, contract law is a state-based form of protection, and there are variances among state laws in this area. Even if current attempts to enact the Uniform Computer and Information Transactions Act (UCITA) to create a uniform law of Internet information contracts are successful—and even if successful, it is likely to be some years before it is adopted in all states—UCITA will give little protection to American database products and services delivered in other nations whose traditions and legal protections differ from ours.

We support that part of HR 1858 that would create a federal tort against database misappropriators who are not in contract privity with the database producer and, as we later state, we would recommend that this tort be extended to any misappropriator of our market data.

Technological Protections

Finally, database producers are relying more on technological protections to help assure that their databases are used responsibly. However, while technology is helpful for assuring that information is not misused, it is also an impediment to increased availability of databases. Both producers and users must incur additional costs in equipment and software to "encrypt" and "decrypt" protected information.

⁶ See, e.g., *Warren Publishing, Inc. v. Microdos Data Corp.*, 115 F.3d 1509 (11th Cir. 1997) cert. denied, 118 S. Ct. 397 (1997), (holding that a comprehensive listing of cable systems did not exercise sufficient creativity in selecting the information and therefore was unprotected against wholesale copying).

⁷ Copyright Office Report, at 83.

⁸ *National Basketball Association v. Motorola, Inc.*, 105 F.3d 841, 845 (2d Cir. 1997).

Users will also have to employ greater sophistication in operating digital systems. Here, for market information to be useful, it must be receivable with a minimum of sophistication by a maximum number of individual investors in real time. Thus, the end result of greater technological protections will be to limit access to these vital databases. Moreover, one of our hopes for Title II, is that, particularly on the Internet, the markets can reduce the length and complexity of their contracts, based on a federal tort of misappropriation created under this bill.

Comments on HR 1858

Given our need to protect our real time market data and the current difficulties in doing so, we welcome this opportunity to offer our views on HR 1858, the Consumer and Investor Access to Information Act of 1999. The laudable goals of Title II of the bill—to provide investors greater access to market data while protecting the markets from market data misappropriation—are shared by the Nasdaq Stock Market and the Amex.

The introduction of this bill and the dialogue it has prompted between affected parties is a welcome development, and the NASD is grateful to you, Mr. Chairman for your role in its introduction and consideration. However, we have concerns with some specific sections of Title II and their potential effect to reduce existing market data protections or create new situations for misappropriation.

Market Information Processor—We suggest that Section 201(e)(6)(c), the definition of “market information processor” be extended to include “any person engaged in the business of collecting, processing, distributing or publishing, or preparing for distribution or publication, or assisting, participating in, or coordinating the distribution or publication of, such market information.” This change would ensure that every market information processor would have the same rights and obligations as the markets. In other words, they would be treated the same.

Preemption—Section 201(2)(4)(A)(ii) would preempt “any other Federal or State law (either statutory or common law) to the extent that such other Federal or State law is inconsistent” with the Title II. We would prefer no preemption provision applicable to market data. However, if such a provision is to be included in the bill, we suggest that that language be changed to “shall supersede any other Federal or State law (either statutory or common law) to the extent that such other Federal or State law provides legal or equitable rights that are equivalent to the rights specified in this subsection.”

The “inconsistent” standard for preemption contained in this subsection is not clear to us. It appears that one would be on equally firm footing to argue that the standard, in such cases, should be that only “consistent” laws are being preempted. The equivalent rights standard that we are proposing is well established in intellectual property law and would provide certainty to the preemption standard. Toward the same objective of ensuring certainty we could support, as an alternative, preemption that is limited to Federal or State laws that proscribe misappropriation, since that is the area addressed by Title II.

SEC Authority—The SEC is the expert federal, independent agency with regard to market data and is best situated to deal with consequences of the current market data regime. The Commission provides a viable forum in which the various views on market data issues can be presented and considered. The experience under Section 11, as administered by the SEC, has validated Congress’ original grant of authority. We believe that the current structure is sound and should be built upon. The Commission staff is currently engaged in a study of market data that includes the pressing issues in this field. The conclusions reached following this study should be accorded deference. Therefore, we suggest that the following section be added at the end of section 201: “The Securities and Exchange Commission shall have the authority to modify the application of this section as it affects securities issues over which it has jurisdiction.” The inclusion of this provision will enable the Commission to address the constantly changing market data landscape without resort to constant statutory modifications. We assume the Commission would continue to solicit industry views in an open airing of these issues. This committee would remain free to, and we would hope it continues to, oversee activities in this area undertaken by the SEC.

Limitation of Remedies—Section 201(e)(5)(c) provides that: “No civil action shall be maintained under this subsection by a market information processor against any person to whom such processor provides real-time market information pursuant to a contract or agreement between such processor and such person with respect to any real-time market information or any rights or remedies provided pursuant to such contract or agreement.”

We are unaware of any compelling reason for such a limitation. Under current law, we can bring actions under our contracts as well as under State misappropriation

tion or unfair trade practice laws, where available. The adoption of section 201(e)(5)(c) would therefore limit out potential recourse against misappropriators of our market data databases.

We are also concerned that, as drafted, a large diversified entity could have a market data contract with one division that then shares it with another division within the entity that, in turn, places the data on the entity's web site. As drafted, we believe that the original division with which we have contracted could be immune from suit under the bill, which we do not believe to be your intent.

If the Committee should conclude that where there is a contract between the parties the misappropriation tort created by the bill will be unavailable, we suggest that a more appropriate dividing line would be in instances where "an action under contract against such person can be maintained." Should a court determine that an action under an existing contract is not maintainable, we would be left with no available recourse under the bill as introduced. This could occur in a variety of situations, such as were US citizens might not be able to bring or maintain a contract action in some countries for political reasons. To create a federal claim without a remedy is ineffective, particularly where an outright market data pirate for profit is the perpetrator. The misappropriation tort created by the bill would be denied, as would an action under the contract, leaving us less recourse than we currently have.

Remedies—In this same regard, we are concerned that HR 1858 as introduced does not include provisions addressing remedies for market data misappropriation such as impoundment, standards for awards of profits from misappropriation, expanded service of injunctions, provision of attorneys fees, criminal proceedings, and a longer statute of limitations. Specifically in regard to the one-year statute of limitations contained in Section 201(e)(5)(A), we suggest deleting this section. The deletion of the section would extend the existing statute of limitations under the Securities Exchange Act of 1934 to market data misappropriation actions created under this bill.

While we understand the potential jurisdictional problems with these provisions in Congress, it could be beneficial if the Committee states its support for those provisions, so that they could more easily be pursued in another venue.

Government Databases—We suggest that section 101(6)(B) be clarified to state that market data that is addressed under Title II of the bill is excluded from the definition of "Government Database." The failure to include such an exclusion could significantly diminish the value of any protections provided under Title II.

Technical Amendments—We would suggest modifications to two technical matters dealt with in Title II. Those suggestions are included in the Appendix to this statement.

CONCLUSION

We thank you for your continued interest in this very significant area and this opportunity for us to present views on HR 1858. We stand ready to work with you and your staff as HR 1858 works its way through the legislative process.

APPENDIX

NASD TECHNICAL CHANGES ON HR 1858

Change: 201(e)(1)(B)—add report language that states that both free distribution and internal distribution are contemplated to be within the language of the statute.

Reason: This deals with the *LaMacchia* problem (where someone puts information on the Internet but does not charge for it), and the problem of a large diversified entity buying one subscription under contract with a vendor and distributing the data to all of its registered reps in house for the one fee.

Change: 201(e)(2)(E) "RELIEF AGAINST STATE AGENCIES." The relief provided under this section shall be available against a State governmental entity to the extent permitted by applicable law."

Reason: Without this change, state universities and other agencies have a license to misappropriate without penalty.

Mr. OXLEY. Thank you, Mr. Furbush.

Mr. Bernard, from the New York Stock Exchange, welcome. Use that microphone, please.

STATEMENT OF RICHARD P. BERNARD

Mr. BERNARD. Mr. Chairman, it is a pleasure to be here to see faces that we have seen at the New York Stock Exchange from time to time. We welcome any of you who haven't seen our factory, our market factory, which I will get to in a minute. We are in our 207th year—

Mr. OXLEY. Is it a hard-hat area down there?

Mr. BERNARD. It is, during construction times. We are in our 207th year of disseminating market data. We are in our 130th year of contracting with people for the use of market data. So this bill is sitting on top of a lot of history. I brought with me a colleague, Mr. Mario Zucchini, who unfortunately died earlier this year. But he did something worthwhile that the committee should know about. As you can see, he is the fellow inside the cannon. In the 1950's or 1960's, he was at a county fair and a TV station videotaped—or whatever they were doing in the 1950's—

Mr. BILBRAY. Filmed it.

Mr. BERNARD. [continuing] his act. He went all of the way to the Supreme Court saying that people can look at my act, but when you film it, you have taken something, my work, my effort, my value added, my sweat of the brow, whatever you want to call it. That is what this bill is about. This is a misappropriation bill. Whatever properties rights are or are not already there, the issue is that we have got a common law on misappropriation. As my colleague has said, for a lot of reasons it makes sense to make that a Federal uniform law and not be dependent on 51 jurisdictions on that.

I would speak to a few points that people have raised. The first issue is who owns market data. Investors, including broker-dealers, bring in the orders or the interests that ultimately result in market data. At the Nasdaq, the other markets, the New York Stock Exchange, it is the interaction of that data that creates the interest, the orders, that creates market data. In the case of a quotation, it has to be the best. It then gets added with other volume to become a bid-ask quotation.

In the case of last sale information, there actually has to be a transaction before there is a last sale price. And so arguments about who owns it really isn't all that relevant. The fact of the matter is that a market has to—people have to interact in a market to manufacture the market data that we are talking about today. Your predecessor committee, as Ms. Nazareth has testified, 24 years ago this June, actually, this month, looked at this issue very carefully and they put together a regulatory scheme designed to make sure that that was done on fair and reasonable terms in terms of charging and not unreasonably discriminatory.

That process has worked pretty well. The SEC has been vigilant. There has been discussions of pilot programs. Those pilot programs, the mechanism was approved by the SEC for the express purpose of letting us experiment in the face of changing technology. Those pilots, that mechanism was approved in the early 1980's before we quite knew what we were up against but allowed us to do a whole series of experiments that have led today to our filing just a few weeks ago. It will be in the Federal Register perhaps later

this week, a pervasive reduction of our market data fees as they relate to information received by investors.

The NASD has filed and approved a pilot basis for such fee reductions. And just to put those in perspective, we now have a sliding scale of three quarters of a penny or half of a penny or a quarter of penny per quote packet. These, by the way, as has been pointed out, are fees to broker-dealers, not to investors unless the broker-dealer cares to pass that fee on. But of course, they face all kinds of other costs whether it be the transaction fees that the stock exchange and Nasdaq requires or whether it is heat, lights, employee costs, taxes, whatever. All broker-dealers, of course, face a whole array of market costs.

I want to mention there are 100 million people in this country who get the market data for free apart from broker-dealers over the web. There is another 7 million that see it on cable television. So market data is quite ubiquitous in this country.

Let me just finish by saying that the Exchange thinks this is a good effort that the committee is engaged in. We, like the NASD, have a few technical issues that we have discussed with your counsel and would be pleased to continue working with your counsel, but the approach of the bill is a good one. Thank you very much.

[The prepared statement of Richard P. Bernard follows:]

PREPARED STATEMENT OF RICHARD P. BERNARD, EXECUTIVE VICE PRESIDENT AND
GENERAL COUNSEL, NEW YORK STOCK EXCHANGE, INC.

Chairman Oxley, Congressman Towns and Members of the Subcommittee, I am Richard P. Bernard, Executive Vice President and General Counsel of the New York Stock Exchange, Inc. (NYSE or Exchange). In this capacity, my responsibilities at the NYSE include the management of the Office of the General Counsel, and Audit/Regulatory Quality Review. I am a member of the NYSE's Office of the Chief Executive and the NYSE Management Committee. On behalf of the NYSE and our Chairman, Richard A. Grasso, I thank you for the opportunity to testify regarding Title II of H.R. 1858, the "Consumer and Investor Access to Information Act of 1999." As you know, Title II amends the Federal securities laws and creates a new cause of action prohibiting the misappropriation of real-time securities market data.

THE UNIQUE NATURE OF MARKET DATA

The NYSE welcomes the Commerce Committee's interest in protecting market data and we commend you, Mr. Chairman, as well as Chairman Bliley, Chairman Tauzin and Ranking Members Dingell, Towns and Markey for introducing this important legislation and for your foresight in handling real-time market data as a distinct issue. NYSE supports the principle that all databases, including securities market databases, deserve anti-piracy protections. The NYSE also believes that investors should have access to real-time market data so that they can be empowered to make educated decisions regarding their financial portfolios. Ensuring the widespread distribution of market data is good business for the NYSE; this data "primes the pump" at the market and helps to generate additional volume for the Exchange. The widespread distribution of market data levels the playing field for all investors and it creates interest, and confidence in the capital markets.

Market data however, is unlike any other collection of information in the United States. It is unique because United States securities markets have distributed it for over two hundred years. It is unique because of the rapidly diminishing value of its usefulness. It is unique because of the roles it plays in allowing Americans to make investment decisions and in preserving the savings of Americans. It is unique because of the role that Congress has assigned to a Federal agency, the Securities and Exchange Commission, in regulating, monitoring and policing its distribution. It is unique because of the vital role that the revenues that derive from its distribution play in the financing of the U.S. securities markets, the most liquid, most transparent, most reliable securities markets in the world.

The Exchange believes that these unique aspects warrant the treatment that Title II affords to market data. My testimony this morning will provide: a brief overview

of the NYSE, the lead role that the NYSE plays in the equity price discovery process, the importance of market data, the NYSE's role in the information age, the regulatory framework in which the NYSE operates its market data business, public access to market data, recent market data fee reductions, and NYSE's involvement in the database protections debate.

Finally, I will offer some comments regarding the need for this legislation.

I. OVERVIEW

A. The NYSE

The Exchange was founded 207 years ago under a buttonwood tree in lower Manhattan. Since that time, it has become the world's leading stock exchange, listing the securities of companies with a total market capitalization of 15 trillion dollars. NYSE is a not-for-profit corporation organized under the not-for-profit law of the state of New York. As such, it is a membership organization. Its 1,366 members, all individuals, have the responsibility to elect the 26 members that comprise the NYSE Board of Directors. Under the Exchange's Constitution, the Board is comprised of equal representatives of both the securities industry and the public. The NYSE Board of Directors approves its operating budget and determines the appropriate allocation from all NYSE fees.

The Exchange's most significant functions include providing investors with a sophisticated, efficient and reliable forum for price discovery of listed securities and providing companies with a sophisticated, efficient and reliable forum to raise capital.

The structure of the Exchange serves a broad range of investors and companies most fairly and efficiently. It is a customer oriented two-way auction market in which transactions take place as result of a combination of open outcry of "bids" and "offers" made by members acting on the trading floor on behalf of their customers and the input of "bids" and "offers" into a sophisticated network of computers. Expert representatives of buyers and sellers meet directly on the trading floor—whether their orders arrive electronically or are handled by a broker—to determine prices by the pure, unadulterated interplay of supply and demand.

On the NYSE trading floor, each stock is traded at a single location at a particular trading post. All buy and sell orders from every member firm funnel to that central location. The centralization of market order flow, as well as the liquidity that the Exchange's member firms provide, contribute significantly to price continuity—the ability to trade securities with minimum price variation from the previous sale. Ninety-eight percent of all Exchange trades occur at the same price as the last sale or within a 1/16-point variation—a characteristic of an extremely orderly and liquid market, one in which stocks can be easily bought or sold. We hope and believe that these margins will tighten even more with the advent of trading securities in decimals. The long-term, steady rise in the volume of trading on the Exchange is testimony to the success of the Exchange in performing the above-cited functions.

Mr. Chairman, the NYSE trading floor is comparable to a factory floor. It does not make cars or refrigerators, rather, it produces real-time market information. The Exchange's database is a collection of last sale prices and quotations in respect of 3200 listed securities, prices and quotations that are at the heart of securities price discovery. Our agency auction market brings together public buyers and public sellers together at the point of sale for the trading of securities. Buyers submit bids and sellers submit offers to the market when they want to trade. The product of every transaction is a continuous update of the quote and last sale prices.

To meet those ever increasing demands, NYSE has invested over \$2 billion over the past decade in technology. That considerable investment has enabled the Exchange to develop and implement a highly efficient and dependable network of systems that has the capacity to handle 600 messages per second.¹ By the end of this year that capacity will increase to 1000 messages per second and the Exchange expects its systems to be able to handle a day in which 4.2 billion-shares are traded. The accomplishments of the NYSE's people and systems were never more visible than on September 1, 1998, the busiest trading day in the NYSE's history, when 1.216 billion shares traded hands.²

That is why over 3200 companies, both foreign and domestic, most of them leaders in their respective industry sectors, have given the Exchange the privilege of trading their stock. Every trading day NYSE provides the world reliable, timely and accurate price information in respect of each of these 3200 securities.

¹ A message is any discrete entity of information that has a specific function such as an order, a report, a cancellation or an administrative message.

² New York Stock Exchange Annual Report 1998 at 7.

The Exchange is also a "self-regulatory organization" or "SRO" with the power to regulate its members. One-third of the NYSE staff is devoted to regulation. Every year the Exchange invests substantial resources to improve its regulatory systems. The Exchange monitors every transaction that occurs on the trading floor on a real-time basis. It examines all member firms to ensure compliance with operational, financial and sales practice requirements. It also maintains a rigorous enforcement program that can discipline our member firms and their employees. NYSE Hearing Panels can fine, suspend, censure and bar from employment in the securities industry our member firms and their employees when their conduct violates the NYSE Constitution and Rules or Federal securities laws.

Why go through all of the expense and effort? To ensure that we have the most efficient, transparent price discovery mechanism in the world. At its core, that is the Exchange's business—the discovery and distribution of price information. The Exchange is the primary market for price discovery. The NYSE price discovery process is the basis for all other trading activity in NYSE stocks, regardless of whether that trading takes place on the Exchange, or on another exchange, in the over-the-counter market, overseas, through the facilities of an alternative trading system or otherwise. Trading in NYSE listed stocks other than on the Exchange would be far more volatile and less orderly without the NYSE pricing mechanism "discovering" the current value of listed stocks.

B. Market Data

What is market data?—Market data consists of bid/asked quotations and last sale prices on stocks, bonds, options, futures and U.S. Treasury instruments. Market data also includes related information, such as the identity of the market on which a trade occurred, trading volume, quotation sizes, and price changes, index valuations and foreign exchange rates. The quote consists of the current "bid" and "ask." The "bid" is the highest price that anyone is willing to pay for a security at a given time and the "ask" is the lowest price that anyone will sell for at the same time. The markets constantly update all of this information throughout the trading day.

Why is market data important?—Market data is the beginning and end and the heart and soul of every trade. It is the information that investors all over the world rely upon in making their investment decisions. One key reason why the United States equities markets are generally acclaimed as the finest in the world is because those markets excel at making market data available to the investing public. That widespread distribution creates trust and confidence in our securities markets. It allows investors to witness the open and orderly auction market price discovery process. Investors can witness through computer terminals; television screens or brokers the agency auction market price discovery process. That process creates investor interest and confidence in our markets and reliable market data is an important component of that trust.

Market data plays a significant role in price discovery, in investor decision making and in generating confidence in the marketplace. Additionally, the revenues that U.S. securities markets generate from the distribution of market data have come to play an important role in helping to finance the operations of the securities markets. In order to support its operations, the Exchange derives revenues from a number of sources, including from transaction fees, listing fees, regulatory fees, membership fees, facilities fees and market data fees. In 1998, market data fees contributed \$112 million to Exchange revenues, an amount that represents 15% of the Exchange's total revenues.³ In 1998, the NYSE spent \$ 202 million on systems to support the production and distribution of market data.⁴ In 1998, professional investors contributed approximately ninety percent of the NYSE's market data revenues. In 1998, fifty cents of every one-dollar of market data revenues were derived from a source outside of the securities industry, such as market data vendors and cable television networks. In recent years, it has accounted for at least 15 percent of revenues for all U.S. equities markets and over 40 percent of revenue for some of those markets. The Exchange believes that the widespread distribution of real-time market data is very important and goes to the heart of the National Market System. Market data revenues are particularly important to the regional exchanges across the United States.⁵ Without market data revenues the securities industry would have to find new ways to finance the regional stock exchanges. Deterioration in those revenues would reduce the resources available to insure the reliability and quality of market

³ Id. at 43.

⁴ Id. at 43.

⁵ The "regional" stock exchanges include the Boston Stock Exchange, the Chicago Stock Exchange, the Cincinnati Stock Exchange, the Chicago Board Options Exchange, the Pacific Exchange and the Philadelphia Stock Exchange.

data and could thereby damage the liquidity and transparency for which those markets are known. Congress' goal of a National Market System would be foiled if the regional exchanges' revenue streams were placed in jeopardy.

The New York Stock Exchange and the Information Age—The NYSE shares the concerns of Chairman Bliley and the cosponsors of H.R. 1858. We believe that consumers should have ready access to all types of financial information, including real-time market data. As Main Street converges with Wall Street via the information superhighway, more and more Americans are taking personal control of their financial decisions, including through direct participation in the equity markets. The NYSE wants to disseminate as much real-time market data to the public. It is extremely easy to obtain free real-time market data on the Internet. After reading and completing a short "click-on" agreement, investors have access to all the free real-time market data they could possibly want. I will discuss the ubiquitous nature of market data shortly.

The Exchange has been making market data available for over 200 years, making it one of the oldest information distributors in the United States.⁶ In the late 18th Century, the NYSE primarily traded government war bonds and securities. The local New York press regularly reported fluctuations in the prices of stocks and the volumes traded. Samuel Morse's invention of the telegraph in 1844 made possible quick market communication throughout the country, thereby providing an important link between brokers and investors well into the 20th century. Similarly, the successful laying of a transatlantic cable in 1866 made an international market system feasible. The invention that most revolutionized the securities market in the 19th century was the stock ticker, introduced to the Exchange in 1867.⁷ The NYSE signed its first market data contract in 1869.

The introduction of fully electronic and transmission and storage of trading information characterized the 1960s. Quotation devices known as "wall boards" were first attached to ticker circuits in the early 1960s to provide bid and asked quotations as well as last-sale prices. As the technology became more sophisticated, other data could be provided. In 1964, a new stock ticker, capable of printing 900 characters a minute and able to handle a ten-million-share day without delay replaced the "black-box" ticker in use since 1930. Information was channeled to the ticker and quotation system by a new reporting device operated from the trading floor. The old pneumatic tube system was finally superseded in 1966 by computer cards. The interrogation device revolutionized the distribution of market data. Today, modern interrogation devices provide dynamic updates.

While the stock ticker made market data more readily accessible and thereby made trading more efficient, it also created a new problem: regulation of the quotation services. During the latter part of the 19th century, popular gambling enterprises known as "bucket shops" developed in America. Bucket shops often resembled legitimate brokerage offices. The proprietors posted on blackboards current stock quotations—sometimes reliable and sometimes rigged—and bet any comer that the price of a stock would rise or fall to a certain named price. No sales of securities actually occurred, and many bettors were swindled. "Bucket shops" also engaged in unscrupulous, hard selling, manipulative securities selling practices. Because their activities cast a bad light on all legitimate brokerage, NYSE deprived such establishments of quotation services. Many bucket shops found unethical ways to procure the market data that they needed to operate. These constituted early examples of market data piracy, a practice that the markets have had to combat ever since. Modern technology only enhances the ability of pirates to pilfer the data. H.R. 1858 would be a welcome tool in that battle.

⁶ Marketplace: A Brief History of the New York Stock Exchange at 4.

⁷ Prior to the introduction of the ticker, messenger boys known as "pad shovers" distributed reports of sales and purchases, who constantly ran between the Trading floor and brokers' offices. No matter how quick they were, fluctuations in prices often occurred during the fifteen to twenty minutes that it took them to complete their circuit.

The speed and accuracy of the ticker's reports were recognized immediately as assets to trading. Several ticker companies were permitted to station "reporters" on the Trading floor to record sales. Their reports went to company operating rooms near the trading area where the name of the stock, the price, and the number of shares traded were typed on a keyboard. Elaborate electric circuitry transmitted the keyboard movements and activated indicator wheels in local tickers. The wheel printed letters and numbers on an easy-to-read paper tape. By the 1880s there were probably one thousand stock tickers installed in the offices of New York bankers and brokers. Because of the importance of accurate ticker reports, the NYSE gradually took control of the information gathering, and in 1885 its own employees began to collect the transaction data to give to the ticker companies. In 1890, the members of the Exchange agreed to establish the New York Quotation Company in order to buy other ticker companies... so as to ensure the accurate distribution of market information. *Marketplace: A Brief History of the New York Stock Exchange* at 14.

Legal Theories—H.R. 1858 would only impact pirates. It would have no impact on honest investors. The legislation would impact the securities markets by protecting the revenue streams on which they have become so dependent.

The securities markets rely primarily upon four legal theories that protect them from the unauthorized taking and use of the market data that they have made available for the past 200 years.

First, the markets look to copyright law. While facts are not copyrightable, the manner in which facts are organized or collected are copyrightable. In *Feist Publications, Inc. v. Rural Telephone Service Co., Inc.*, 499 U.S. 340 (1991), the Supreme Court affirmed the copyrightability of a collection of information, so long as the collection demonstrates an adequate quotient of creativity and selectivity. The Court stated that only a small amount of creativity is necessary, but concluded that alphabetizing the listings in a telephone book was insufficient. The many decisions that the markets make in selecting, creating and formatting the market data that they make available afford copyright protection to those databases.

Second, the markets look to the law of torts and, in particular, the tort of misappropriation. Section 301 of the Copyright Act generally preempts state law to the extent that it regulates a right that is equivalent of a right granted under the Copyright Act. Market data however qualifies for the "hot news" exception to Copyright Act preemption that the Supreme Court created in 1918. (See *International News Service v. Associated Press*.) The Second Circuit Court of Appeals limited the "hot news" exception in *National Basketball Association v. Motorola* (2d Cir. 1997). However, the markets' data businesses present a more compelling case for application of the exception than do the basketball statistics that were the subject of the *NBA* case. Also supporting the markets is the following language in the Copyright Act's legislative history (House Judiciary Committee, Report No. 94-1476 at p. 132):

[A] cause of action labeled, as "misappropriation" is not preempted if it is in fact based neither on a fact within the general scope of copyright...nor on a right equivalent thereto. For example, state law should have the flexibility to afford a remedy (under traditional principles of equity) against a consistent pattern of unauthorized appropriation by a competitor of the facts (i.e., not the literary expression) constituting "hot" news, whether in the traditional mold of *International News Service v. Associated Press*...or in the newer form of data updates from scientific, business, or financial data bases.

Third, the markets rely upon the pervasive network of contracts pursuant to which they authorize the redistribution and use of market data. Note in this regard the Seventh Circuit Court of Appeals' decision in *ProCD v. Zeidenberg* (7th Cir. 1997), which held that the Copyright Act does not preempt shrink wrap licenses or other state law involving consensual dealings over copyrighted subject matter.

Fourth, the markets look to Section 11A of the Securities Exchange Act of 1934, as amended. Section 301(d) of the Copyright Act makes clear that the Copyright Act does not limit any rights or remedies under that section or any other Federal statute. While Section 11A requires the markets to make their market data available, it also recognizes their authority to do so pursuant to fair and reasonable terms and terms that are not unreasonably discriminatory. (See Sections 11A(c)(1)(C) and (D).) After a quarter-century of enforcement and monitoring of these standards by the Securities and Exchange Commission, distribution pursuant to these standards has vastly increased the investment community's access to market data. Simultaneously, it has enhanced an equitable source of revenues for the financing of United States securities markets. Both constitute important public interests.

C. Regulatory and Operational Frameworks

The Regulatory Framework for the Distribution of Market Data—In 1975, Congress enacted the most sweeping securities legislation in forty years: the Securities Acts Amendments of 1975. Those amendments authorize the Securities and Exchange Commission (the "SEC") to work with the securities industry to create an efficient and competitive National Market System. A key element of that system is the markets' provision of last-sale price information and quote information on a consolidated basis. That means that the markets join together to report to the public (1) the last price at which a trade in a security takes place regardless of the market on which that last sale takes place and (2) the best price that is currently being bid or asked for a security, regardless of the market to which the broker-dealer representing the quote reports it.

In enacting the 1975 Amendments, Congress called the broad distribution of market data the "heart" of our national market system. At the same time, Congress reaffirmed the ability of markets to support their operations by charging for market data so long as the fees are fair and reasonable and not unreasonably discriminatory. In compliance with that mandate, the markets submit all rules regarding the

inter-market distribution of market data, including all fee changes, to the SEC for approval. The SEC may deny the changes if they fail to meet the statutory criteria.

We understand that the SEC will soon release a study on market data. This study will be the subject of public comment. The NYSE welcomes that study and we stand ready to assist the Commission in their efforts to compile whatever information they require to complete it.

The Consolidated Tape Association—Since 1975, the SEC has taken regulatory action under Section 11A of the 1934 Act to implement Congress' design for this new National Market System. The U.S. securities markets in turn, have responded to the congressional mandate and SEC rulemaking by forming the Consolidated Tape Association (CTA) and Consolidated Quotation (CQ) plans and developing of assorted systems to fulfill that mandate. The markets formed the Securities Industry Automation Corporation or SIAC to develop and operate the massive and expensive systems that the markets require to provide all price and quote information in a timely manner to SIAC for consolidation, processing and distribution to vendors. Vendors repackage market information into user-friendly formats and distribute the repackaged data to broker-dealers, investors, newspapers, cable and broadcast television networks, Internet sites and other elements of the public. The SEC takes an active role in the formation of the CTA and CQ plans and in monitoring data distribution pursuant to the plans for the last twenty-five years. The SEC attends all CTA meetings to ensure that the protection of the public interest in all decisions pertaining to market data distribution. CTA financial reports are available to the SEC for its review. The public has access to NYSE revenue and costs through access to NYSE Annual Reports, which are available on the Exchange's website: www.nyse.com.

CTA is the administrative body that oversees the administrative, collection, processing and distribution of market data relating to exchange listed stocks. CTA is composed of the American Stock Exchange (Amex), the National Association of Securities Dealers (NASD), the NYSE, and the regional stock exchanges.⁸ CTA operates two networks. Network A disseminates market data of securities that are listed on the NYSE. Network B disseminates market data of securities that are listed on the Amex or one of the regional exchanges. The markets administer the CTA Plan and CQ Plan and have designated the Securities Industry Automation Corporation ("SIAC") as the exclusive processor of this market information. SIAC registers with the SEC as a securities information processor under Section 11A of the 1934 Act.

In addition, NASD produces and distributes directly to vendors market data related to its over-the-counter market securities. Because NASD also trades exchange-listed securities, it is also a member of the CTA and CQ Plans, and shares in the Network A and Network B revenues. The Options Price Reporting Plan ("OPRA") does the same in respect of market data relating to options.

The consolidated tape system reports the price and number of shares for every trade. The ticker tape is broadcast immediately by news organizations and on-demand market data is piped via high-speed communication lines to computer terminals and an increasing variety of financial information services.

Ironically, the NYSE must purchase market data from one of our vendors and we will spend approximately 3 million dollars to provide consolidated real-time market data to the trading floor and to NYSE employees. Even though the NYSE produces market data, our product is consolidated with the other equity markets in a user-friendly format. The Exchange sends its own real-time market data to the SIAC. SIAC in turn sends a real-time market data feed of all of the CTA members to individuals, market data vendors, broker-dealers, corporations, institutions and news organizations. Additionally, the SEC, the Board of Governors of the Federal Reserve System, the Commodity Futures Trading Commission, the Department of the Treasury, the Federal Housing Finance Board, and the Federal Reserve Bank of Chicago receive NYSE market data.

The markets' make considerable expenditures of capital to assure that all of the inter-related systems required to make all of this happen are "industrial strength" so as to minimize outages, errors and delays, even in light of an ever-increasing level of volume and increasing individual participation in the U.S. securities markets. The markets are proud of their record in making data available quickly, widely and error-free.

Public Access to Market Data—In today's information-based society, real-time market data is ubiquitous. CTA has as one of its highest priorities facilitating access to real-time market data to all investors. The markets currently distribute real-time

⁸The regional stock exchanges include the Boston Stock Exchange, the Chicago Stock Exchange, the Cincinnati Stock Exchange, the Chicago Board Options Exchange, the Pacific Exchange and the Philadelphia Stock Exchange.

market data to individuals, institutions, broker-dealers and market data vendors in over 100 countries. In 1996, CTA became the first group to allow television networks to broadcast a real-time ticker and 70 million people have access to free real-time market data on cable television through CNBC, CNNfn and Bloomberg. Alternatively, investors can receive market data through personal computers or voice-response technology, on their pagers, over fax machines and on other hand-held devices. Millions of investors have access to free market data through their brokers at no charge to them. Over 100 million investors have access to both free delayed or real-time market data via public websites at no charge. The widespread availability of this information demonstrates that the market place continues to be the best forum for solving business problems, even as we move from traditional commerce to e-commerce. As e-commerce has exploded in the last five years, the markets have responded by making market data readily available to investors.

Non-professional Market Data Fee Reductions—The Exchange and its fellow securities markets are dedicated to making market data as widely accessible to the public as possible. In recent years, two factors have facilitated that access and allowed the markets to distribute market data to an ever-widening audience at reduced rates. First, the growth of individual participation in the equity markets and the attendant increase in investor interest in market data have been astounding. Second, access to the Internet has given all investors the opportunity to gain easy access to market data.⁹ Many on-line broker-dealers provide real-time market data to investors at no charge to the investors. What's more, the securities markets are in the process of significantly reducing the fees that they charge in respect of the nonprofessional segment of the investor community.¹⁰

On April 1, 1999, after a year's worth of discussions with all of the NYSE's constituent groups that subscribe to market data, the NYSE Board of Directors unanimously approved significant reductions in market data rates for the non-professional investor. For NYSE-listed stocks, the markets have filed with the SEC for permission to reduce the monthly rate payable by vendors and broker-dealers in respect of their nonprofessional subscriber customers from \$5.25 to \$1.00. As an alternative to the monthly per-subscriber rate, the market permits vendors and broker-dealers to provide data by paying a per-quote fee. For NYSE-listed stocks, the markets have filed with the SEC for permission to significantly reduce the per-quote fee from its current one-cent-per-quote rate. In an effort to further reduce market data costs paid by broker-dealers, the markets that make available market data relating to NYSE-listed stocks have filed with the SEC to cap the total fees that broker-dealers pay to provide certain services at \$500,000 per month. On top of that, the markets permit the distribution of last-sale prices that are no less than 15 or 20 minutes old (depending on the market) at no charge to vendors, broker-dealers or investors. Other markets are similarly reducing costs.

This rate reduction certainly demonstrates the NYSE's commitment to complete and open distribution. Earlier this month, the Securities and Exchange Commission approved as a one-year pilot program the National Association of Securities Dealers non-professional market data rate reductions.

The increased level of interest on market data, as well as the facilitation of distribution made possible by the Internet and other technological advances make these fee reductions possible. The markets believe that they have priced market data in a manner that makes access for individuals easy and inexpensive.¹¹

II. THE DATABASE PROTECTION DEBATE

The debate whether to enact legislation for the protection of databases has been ongoing since 1991 with the Supreme Court decision in *Feist Publications, Inc. v. Rural Telephone Service Co., Inc.*, 499 U.S. 340 (1991), (stating that "originality," not effort forms the basis for copyright protection). That decision eliminated the "sweat of the brow doctrine,"¹² holding that expenditures of time, effort and money do not afford copyright protection to a collection of information. Since *Feist*, the

⁹The following are examples of Internet sites offering free real-time market data to investors: www.marketguide.com; www.tradingday.com; www.quotecentral.com and www.freerealtime.com; www.thomsoninvest.net. These sites do require that each subscriber complete a short "click-on" agreement.

¹⁰The markets impose those charges not on the individual, but rather on the vendor or the broker-dealer from whom the individual receives the information.

¹¹Investors that are more intensive users of market data subscribe to services that market data vendors provide. Those vendors charge investors for the value that they add to market data services, charges that normally exceed the fees that the markets charge by a wide margin.

¹²*Feist Publications, Inc. v. Rural Telephone Service Co., Inc.*, 499 U.S. 340 (1991), (stating that originality, not effort, forms the basis for copyright protection).

source and extent of legal protections for the "valuable contents of collections of information has been uncertain, requiring reliance on a patchwork of different, individual insufficient legal theories."¹³

The debate intensified in 1996 with the announcement of the European Union Database Directive. Under that Directive, U.S. database companies gain no protection from the Directive's provisions unless the United States enacts reciprocal protections that the European Union deems comparable to its own. The European Union's adoption of the Directive therefore jeopardizes the continued development of valuable databases in the United States.

Congressional committees have been examining the database protection issue since the 104th Congress. Despite misinformation to the contrary, the NYSE did not join the debate until March 1998. The Exchange became engaged in this process at the invitation of the House Courts and Intellectual Property Subcommittee, only after it determined that database protection legislation could do more harm than good to the market data business if not properly crafted. Working with Chairman Bliley and the Commerce Committee the Exchange helped to draft an amendment that would preserve the SEC's jurisdiction over market data, and protect the National Market System. The NYSE supported Chairman Bliley's amendment and, despite further misinformation to the contrary, continues to support the SEC's oversight of market data.

The NYSE supports the enactment of a national statute that will protect securities market data from piracy. A Federal statute will clarify any possible ambiguity in the law caused by the Feist decision and will hopefully address the issue of reciprocity with the EU Directive. Title II of the bill provides a well-balanced approach that is forward-looking. It will impose minimal compliance burdens on the markets or vendors and users of market data. Yet, at the same time it will provide the markets with redress against market data pirates, thereby preserving a revenue stream that has come to play such an important role in the financing of the markets.

Just as the "bucket shops" of the 1890's took advantage of that era's state-of-the-art technology (the ticker), the information superhighway could provide enterprising swindlers with a new forum for fraud. Given that the Federal securities laws are silent on the piracy of data, H.R. 1858 provides the framework for the development of a weapon that would aid the private sector in its fight against piracy. In so doing, this bill will help to ensure the integrity of the free flow of market data, the lifeblood of the capital markets.

While we welcome Chairman Bliley's legislation and support the principle it embodies, we do have several concerns with H.R. 1858 in its current form. The Commerce Committee staff has been receptive to our comments to date, and we have worked with them since January of this year to improve the bill and believe that substantial progress has been made. We trust that we can continue to address the remaining problems as this important legislation moves forward through the Committee process. We look forward to working with you, Mr. Chairman, and your staff to ensure the ultimate enactment of this crucial measure into law. The most pressing of our concerns are discussed below.

Concerns with H.R. 1858

Crafting legislation to protect the sanctity of data produced and distributed by the markets must ultimately operate within preexisting business and legal frameworks.

- **Preserve state law protection.** We support an approach, which would permit the markets to continue to avail themselves of existing causes-of-action under state contract law or however, pursuant to state common law misappropriation theories. Allowing plaintiffs to pursue state law misappropriation remedies is particularly important in light of the limited remedies provided in this bill.

- **Strike the statute of limitation provision.** This misappropriation cause of action should be subject to the same statute of limitation as generally applies for other state misappropriation law (3 years) or causes of action under the Securities Exchange Act of 1934.

- **Do not change SEC authority.** Section 201(e)(6)(B) would grant to the SEC the power to prescribe the extent to which market information shall be considered real-time information. This is an area into which the SEC has not previously delved, but rather has left to the markets to determine. Without determining whether the 1934 Act already confers this power upon the SEC, we believe that it would be inappropriate to add this authority as part of an anti-piracy bill. This important issue

¹³ Hearing on H.R. 2652, The Collections of Information Antipiracy Act before the Subcommittee on Courts and Intellectual Property of the Committee on the Judiciary, United States House of Representatives, 105th Congress, Statement of Marybeth Peters, Register of Copyrights at 4 (October 23, 1997). See also H.R. Rep. No. 105-225, at 8 (1998).

merits careful consideration and should not be resolved as an unstudied adjunct to anti-piracy legislation. We fear that the provision would undermine one of the basic legal precepts that supports the markets' ability to recover for the distribution of data, a precept that parallels the justification that underlies the "hot news" doctrine that the Supreme Court established in 1918¹⁴. The law should grant an entity a sufficient amount of time to compensate it for the expenditures for collecting "news" (in the form of market data in this case) before allowing others to pirate that news and redistribute it in competing venues. We believe that economic realities should determine the appropriate time period for addressing that compensation and that the markets are better able to make that determination.

• **Market data is not a government database:** Under Title I, Section 101(6)(B), lines 18-20, every exchange and market will qualify as a government database. This might have the unintended consequence of eviscerating the benefits that Title II affords to the markets and we believe that the bill should clarify that this is not the case. While the Securities Exchange Act of 1934 requires the securities markets to consolidate their data on a real-time basis, this data is not collected or maintained to accomplish a governmental function. The U.S. securities markets are not public agencies or government entities. We suggest an explicit statement in the bill to that effect.

These changes to H.R. 1858 are necessary to the creation of a meaningful statute to enforce the unauthorized taking of real-time market data. We remain at the Committee's disposal to work toward addressing any issues that arise with respect to this legislation.

The Exchange welcomes H.R. 1858 and the new cause of action that it seeks to create. We thank the cosponsors for introducing this important legislation. We want to continue our productive working relationship with the Committee on issues affecting the capital markets. We hope that the Exchange's concerns can be addressed as the legislation moves forward. Thank you again for the opportunity to present this testimony. I would be happy to answer any questions that you may have.

Mr. OXLEY. Thank you, Mr. Bernard.

Our final witness is Ms. Carrie Dwyer from Charles Schwab. Welcome.

STATEMENT OF CARRIE DWYER

Ms. DWYER. Thank you, Congressman Oxley, Congressman Towns, members of the subcommittee. I am Carrie Dwyer, general counsel and executive vice president for corporate oversight of the Charles Schwab Corporation. We are grateful to Chairman Bliley as well as you, Congressman Oxley, Towns, Dingell, Markey, and the many others who have joined in introducing this bill which we think is a good effort.

This is an issue that has been of great interest to our firm almost since its inception. Twenty-five years ago Charles Schwab was founded trying to do a new way for investors to access the markets. The company's mission was—and is—to empower the individual investor to achieve his own financial goals.

Schwab is currently entrusted with the assets of 6.5 million customers, 2.5 million of which access us online on any given day. We believe we are the second largest brokerage firm in the country in terms of retail customers, and we are the largest Internet brokerage in the world by any measure. In the first quarter of this year, for example, our firm processed over 200,000 retail trades per day and over our web site, \$2.3 billion is transacted every day; 80 percent of Schwab's trades come to us over the Internet now.

Clearly empowering investors has been something that has been well received by investors. This strategy led Schwab to be the first broker back in the mid-1980's to offer real-time market data directly to customers. Next came the technology to allow customers

¹⁴See *International News Service v. Associated Press* (1918).

to directly enter their own trades, directly access financial information, 24-hour-a-day 7-days-a-week access to your account and more recently foreign language capability whether you come to us through a broker in our Denver call center, through the Web, or as I said, over the phone. There is more to come.

Who owns market data, how much it should cost, and how to protect legitimate interests in it are all questions that we care a lot about. We think the answers should be the public owns market data which is required to be consolidated under the 1934 act. Market data should be fairly priced at a level which recovers the cost of collecting and disseminating it. Protections against misuse should be carefully tailored to assure that we don't damage the transparency of our markets.

The sale of market data to investors and vendors is probably unique in commerce. Imagine if Walmart charged its customers to enter the store and look at the prices of the goods on the shelves. It would not really be a successful marketing strategy unless you are the only store around. Market data may be the only advertising that customers have to pay to see.

Schwab has been at the forefront in providing information to its customers, but our ability to do so comes at a cost. We pay fees to receive these market data. That is fine to the extent that stock markets have incurred costs in getting consolidated data to us. But the higher the cost of the data whether we absorb it or pass it onto our customer, the more of a barrier that cost poses to providing good data, timely data to our customers in as many ways as they want it and in the form they want it. The higher the cost of real-time data, the greater the incentive to use delayed data for certain functions which is inherently inferior.

We are concerned that the charges for market data may not be sufficiently related to the cost of delivering it to investors. Yet Congress made it clear when it created the consolidated system that it expected the SEC to oversee the reasonableness of the fees charged by the processors. We have asked the SEC to do this in a petition we filed with them yesterday. The exchanges have said that the excess market data revenues are needed to fund their self-regulatory operations or, as we just heard, their fundamental operations.

We don't find authority in the exchange act for this and we don't actually think it is allowed by the exchange act. But even so, the exchanges have not shown us that this is so, and we have asked the SEC to also examine how the revenues are used by the markets in order to determine whether the costs are fairly and equitably distributed. We depend on robust self-regulation to keep our markets honest, but we believe the cost should be borne by exchange members directly, not imposed as a hidden tax on investors.

When Congress mandated consolidated market data, it was intent on fostering transparency and widespread availability. Throughout the exchange act amendments, Congress attempted to remove barriers to competition and to improve access to the markets. Rather than vest ownership of market in the stock exchanges, Congress affirmed its inherently public character. Concern that the centralization of the collection and dissemination would effectively create a monopoly over market data led Congress to regulate the

processors' role and to give the SEC extensive oversight authority as a first line of defense against anticompetitive practices.

I want to thank the committee for your leadership on a critical issue. It affects tens of millions of American investors. We look forward to working with you, and I am pleased to answer any questions that you may have. Thank you.

[The prepared statement of Carrie Dwyer follows:]

PREPARED STATEMENT OF CARRIE DWYER ON BEHALF OF CHARLES SCHWAB CORPORATION

Chairman Oxley and distinguished members. My name is Carrie Dwyer, and I am General Counsel and Executive Vice President for Corporate Oversight at Charles Schwab & Co., one of the nation's largest brokerage firms. Schwab was founded 25 years ago as a pioneer in discount brokerage, making Wall Street accessible at a reasonable price to ordinary retail investors. Today, Schwab is the second largest brokerage in the country in terms of customers. Schwab has over 6 million active accounts of which 2.5 million are online accounts. Schwab is by far the largest on-line brokerage in the world. In the first quarter of 1999, Schwab handled over 200,000 trades per day and did more than \$2 billion of commerce each day on its website. I would like to thank you for this opportunity to discuss the importance of market data to the securities industry and the importance of H.R. 1858 to preserving the integrity of the collection and use of that data.

What is Market Data

Perhaps the single greatest reason for the success of the U.S. capital markets is their transparency. The widespread availability of market data is what democratizes our markets. It is what allows individual retail investors to make informed investment decisions about their savings for college or retirement. Current, accurate, reliable market data enables individual retail investors to trade on a level playing field with professional institutional investors. It is also the backbone of our national market system—a unique system set up by Congress in 1975 by the adoption of section 11A of the Securities Exchange Act of 1934. This system links all stock exchanges and over-the-counter markets by making information about securities transactions widely available and allows investors to enter orders in one market yet still benefit from better prices available on other markets. Market data is a critical component in the integration of what would otherwise be an unconnected and fragmented collection of securities markets.

Market data consists primarily of the prices at which investors and broker-dealers are willing to buy and sell securities and the prices of completed transactions. Real-time market data, that is, data that shows transactions and quotations as they are occurring, is collected from the broker-dealer members of the stock markets by registered securities information processors, like the Consolidated Tape Association. These processors package and distribute the market data to information vendors, like Bloomberg, and also to broker-dealers. Investors rely on this information to evaluate potential investments and to determine the best prices available in the market.

The National Market System

The widespread availability of market data, however, was not always a part of the U.S. markets. Prior to 1975, investors were required to use an intermediary to get a current quote or last sale. Control of the critical information needed to make a trade was vested in a few professionals. If an investor wanted to compare prices available on each stock market, he would need to have access to price information from each market separately. The hidden value of real prices made the markets subject to manipulation, and prevented investors from finding the best price, or evaluating whether a price was fair. When Congress acted in 1975 our markets were badly fragmented and opaque—and investors paid the price.

The 1975 amendments to the Exchange Act were designed to correct this imbalance by giving investors the tools necessary to better evaluate transactions. This in turn fostered a more efficient, fair and orderly national market. Congress accomplished this by requiring the collection of price information from all stock markets into a centralized location and making that information publicly available through registered securities information processors. The stock markets were required to enter into joint plans for the collection and dissemination of this information and to cooperate in the management and implementation of these plans by the processors. Congress did not create any ownership interest in the collected data for the

stock markets, the joint plans or the processors, but instead required the cooperative efforts of the stock markets to ensure that the data was available for the benefit of all investors and the public generally. Throughout the 1975 Act Amendments, Congress acted to remove barriers to competition and to improve individual and institutional access to markets. Rather than vest ownership of market data in the stock exchanges, Congress reaffirmed its public character.

Congress did express concern that the processors, and accordingly the stock markets that administer them, would effectively create a monopoly over the collection and dissemination of market data. Congress emphasized that the processors should "function in a manner...neutral...to all market centers," and thus entrusted the SEC with the job of acting as "a first line of defense against anti-competitive practices" by granting the Commission broad authority to regulate registered processors. The SEC was given the "responsibility to assure [a] processor's neutrality," including the reasonableness of the fees it charges for access to market data.

Exchange Act section 11A, and the rules thereunder, are thus designed to prevent unchecked monopolistic control over the means of collection and dissemination of market data by the processors and their participant markets and to ensure that the terms of access to market data are fair, reasonable and non-discriminatory to all.

The Importance of Real-Time Market Data to Our National Market System.

Ensuring the broadest possible access to market data is essential to the protection of investors and the fairness of our markets for everyone. Schwab believes that access to this data on fair and equitable terms is critical to ensuring that all investors, no matter where they trade, have the information that is essential to making fully informed investment decisions. All retail customers at all firms depend on this.

Schwab, like most brokerage firms, purchases market data from the registered securities information processors, which share their revenues with the stock markets that participate in their operation. Schwab then distributes real-time quotes and transaction prices directly to its customers, generally free of charge. For our online customers, real-time data is only a mouse-click away. For all other customers, real-time data may be obtained over the phone or in-person at our branch offices.

The stock exchanges and the NASD earn substantial revenues from their participation in the plans that collect and distribute market data. In 1998, the New York Stock Exchange, the American Stock Exchange, and the NASD reported \$339 million combined market data revenues. Schwab alone paid a total of over \$19 million dollars, or 5.6 percent, of this amount for market data in 1998.

Notwithstanding the large revenues earned for market data and the corresponding costs imposed on investors, the Exchanges have never shown any correlation between the cost of operating the market data plans and the prices charged for data. Nor has the fairness of the allocation of market-data fees among various classes of market participants been evaluated. This is contrary to Congress' original goals for the 1975 amendments to enhance the fairness and efficiency of the markets for all investors.

Moreover, we are in the midst of a technological revolution, in which access to technology has enabled investors' costs to shrink dramatically, transforming the way in which we deliver products and services to them. Our firm has over the past year questioned whether, in a time of rapidly decreasing cost in every aspect of our business, there is any valid justification for the continuing high cost of market data.

The exchanges have asserted that the excess market-data revenues are used to fund their self-regulatory obligations—to surveil the markets for fraud, abuse and other violations of the securities laws. We don't believe the Exchange Act permits this, but perhaps more important, the securities markets have not shown this to be the case. Moreover, as important as self-regulation is, it should not be allowed to act as a shield to protect the exchanges from charging unfair and excessive fees for market data. The costs of self-regulation should be borne by exchange members directly, as we believe they are through existing fees and dues, and not transferred to retail investors seeking access to market data.

In responding to this argument, stock markets have tried to assert a new "property right" to market data and have backed H.R. 354, the "Collections of Information Antipiracy Act," sponsored by Representative Howard Coble (R-NC), to secure such rights. We believe this is inconsistent with the goal of widespread access to market data. To see how a property right in market data is inconsistent with the Exchange Act goals, consider what market data is. When an investor places an order with his or her broker, that order is typically transmitted to a stock exchange or the over-the-counter market to locate a matching counter offer. If the investor's order is the best price in the market, it is included in the information collected by the securities information processors and disseminated back to the broker-dealers and information vendors as market data. The customer (or the customer's broker)

must pay to see whether the customer's own order is being properly displayed in the market. Even an OTC market maker must pay to see his own bid and offer.

Further, the system of collecting and disseminating market data is not voluntary. It is mandated by the Exchange Act and the rules adopted thereunder to achieve centralization of market data. But a need for central collection and dissemination in effect creating a sole source provider, should not become the basis for a property right in the data itself.

No one can legitimately claim to "own" market data. Market data, such as broker-dealers' bids and offers for a stock, are facts: the current prices for securities. Investors and broker-dealers, and not exchanges, create these "facts." Granting market data ownership or copyright protection to any one party would be antithetical to the very purposes of the national market system and to longstanding principles of intellectual property law.

The stock markets have expressed serious concerns, however, about potential misappropriation or "pirating" of the CTA/CQ databases. All market participants have an interest in assuring the integrity of these databases. In recognition of this, H.R. 1858 addresses the potential problem of market data misappropriation in a straightforward and appropriately limited manner. Schwab supports this approach.

Analysis of H.R. 1858, Title II's Key Provisions.

The goal of Title II of the bill is to protect investor access to market information in light of recent developments in database and digital technologies. Some believe that advancing technology has increased the risk of data piracy. To address this issue, the bill prohibits the misappropriation of real-time market information that the securities markets collect and disseminate pursuant to section 11A of the Exchange Act. It does so by establishing a cause of action for the exchanges and SIPs to enjoin and seek damages against anyone who sells or distributes market data without authorization.

The premise of the bill is that any pirating of market data unfairly burdens the securities markets and those, such as Schwab, who pay for the market data. H.R. 1858 appropriately protects the markets' joint investment in data technology and infrastructure against persons who, without authorization, take market data without paying for it. Schwab supports H.R. 1858 as a measured response to the exchanges' concern about market data misappropriation.

We also support the bill as a commonsense alternative to the approach contained in the Coble bill, which would apply extremely broad definitions and concepts of "information" and "maintaining a database" to securities market data, and would grant the exchanges extraordinary civil remedies (including impoundment) for perceived competitive harm from any market data use they do not specifically approve. As a result, the Coble bill would grant the exchanges new rights and control over market data extending well beyond protection from misappropriation. Unnecessary restrictions on the use of market data could also chill innovative uses of market data, such as streaming quotations or technical tracking.

Moreover, these new rights would exist outside the framework Congress carefully crafted for the national market system and placed under SEC oversight. Given the paucity of examples of securities market data piracy, and the fundamental purposes of the national market system to assure equal and non-discriminatory access to market data, we believe the Coble bill's approach is fundamentally misguided.

Below is an analysis of key provisions of Title II of H.R. 1858, including additional reasons why Schwab supports the bill as currently drafted.

Disputes with Market Data Vendors Are Excluded. Paragraph (e)(5) of the bill makes clear that information vendors, such as Bloomberg and Schwab, are outside the scope of the bill. In other words, because vendors receive and distribute market data from the securities markets by contractual agreement, any dispute between the exchanges and a vendor would be resolved under state contract law. Any such disputes about market data distribution would arise as either a contract dispute or a matter between an exchange and its member. Such disputes should not become a federal cause of action under the Exchange Act.

No Copyright or Property Rights or Interests Are Created. It would be contrary to national market system principles and longstanding intellectual property law to confer ownership rights over market data. By granting a limited cause of action to the securities markets for a limited purpose under section 11A of the Exchange Act, Title II makes clear that rights in the data itself are not created.

The bill only applies to "real-time" market data: i.e., data that is immediate and current. The limited scope of the bill reflects that its purpose is to further the national market system goals of transparency and fairness, not to create property rights. In addition, paragraph (e)(3) expressly preserves the right of persons other

than the securities markets to independently gather and distribute real-time market information.

Preemption of Inconsistent State or Federal Law. H.R. 1858 appropriately balances state law concerns with national market system goals. Paragraph (e)(4) supersedes state and federal law to the extent it is "inconsistent with" the bill. This is necessary and appropriate as Title II creates a new cause of action for the securities markets under the federal securities laws to address the potential problem of piracy that the markets have identified. At the same time, H.R. 1858 preserves state contract law claims with respect to contractual disputes between the exchanges and information vendors. More extensive state law misappropriation theories would be inconsistent with the bill's goals. Moreover, we do not believe the bill will disadvantage the states, as we are unaware of any prior state law claims relating to the collection or use of market data.

The Definition of "Real-Time." We believe "real-time" should be interpreted to mean what it says: right now, immediately, or the time it takes to transmit the information from the securities markets to the public. After that point the market data becomes stale and is readily available in the public domain. However, it may be the case that what appropriately constitutes "real-time" information may vary depending on the existing state of technology, the different types of market data and how market participants use market data. Accordingly, paragraph (e)(6)(B) grants the SEC rulemaking authority to define further the meaning of "real-time" in specific contexts. This rulemaking grant is permissive, not mandatory and grants the SEC appropriate discretion to act if necessary.

For these reasons, Schwab is pleased to support H.R. 1858 as a considered, measured approach to the risk of market data misappropriation.

Schwab's Petition for Cost-Justified and Non-Discriminatory Market Data Fees

Closely related to the goal of protecting market data is the equally important goal of assuring that access to market data is on fair, reasonable and non-discriminatory terms, as required by section 11A of the Exchange Act. SEC Chairman Arthur Levitt has announced that the Commission's Division of Market Regulation will be conducting a comprehensive review of market data distribution and fees. We applaud this effort, but believe it must be followed by substantive reform.

The stated purpose of H.R. 1858 is "to promote electronic commerce through improved access for consumers to electronic databases, including securities market information databases." Schwab believes that this is one of the most important goals for the securities industry—that is, to improve investor access to market data.

Online investing has been a driving force in opening access to the markets for retail investors, and a significant component of this growth is the ready access to market data online investors enjoy. Schwab has been at the forefront of providing this information to retail investors in an electronic environment. However, our ability to provide information comes at a cost. Specifically, we pay fees for the receipt and use of market data.

The cost of market data, whether passed-on or absorbed by a broker-dealer, is the single greatest hurdle in providing investors with access to market data. While Schwab is committed to providing access to timely and complete information, our central concern with the cost of access is that it is not fairly allocated among all market participants, thus not all investors receive market data on equivalent terms.

We believe that the current fees discriminate against our customers. For example, online retail investors must either pay a penny-a-quote or a fixed monthly fee of up to \$5.25. For firms like Schwab that absorb these fees for the benefit of their customers, there is virtually no cap to the monthly market data expense. In stark contrast, traditional brokerage firms that deliver market data to their customers the old-fashioned way—through a broker or the telephone—pay a fixed monthly terminal fee no matter how many quotations they deliver. We think this fee structure penalizes Internet technology and direct investor access to market data, and has resulted in online brokers and their retail customers paying grossly excessive market data fees.

Yesterday, Schwab filed a petition with the SEC requesting that it institute rulemaking to govern the terms of access to market data. In particular, Schwab requested that, to ensure the fairness of market-data fees, the SEC adopt rules to require that fees be related to the cost of collecting and disseminating market data. This is the standard the SEC itself has articulated. In addition, Schwab requested that the rules ensure that market-data fees are allocated in a fair, reasonable and non-discriminatory manner consistent with section 11A of the Exchange Act. Greater transparency of the fees, costs, contracts and policies relative to the collection and dissemination of market data is essential to meeting these goals. The processors have in the past avoided public and regulatory scrutiny in a number of instances

by instituting fee changes through "pilot" programs that were not filed with the SEC for review, approval and, importantly, public notice and comment.

Schwab believes that SEC intervention into this matter is critical for a fair and prompt resolution of these issues for several reasons, many of which are relevant to this committee's consideration of this bill. For example, although the processors are directed by the Exchange Act to distribute market data in a fair, reasonable and non-discriminatory manner, the processors are operated by joint action of the existing securities markets, and those markets share in the processors' revenues. Combined with the absence of public and industry representation on the processors' boards, it becomes natural for the processors' operations to favor the interests of the individual stock markets, rather than the interests of all market participants. This is exemplified by the recent programs offered by several markets to rebate a portion of the fees paid by certain classes of market participants based on their volume of trades in that market, for the purpose of capturing order flow. These programs help the markets involved to compete, but do not foster the goals of widespread and fair dissemination of market data to all investors. Prevention of monopolistic control of market data was recognized by Congress during the passage of the 1975 Amendments to the Exchange Act, and is equally important in the context of H.R. 1858.

The 1975 Amendments to the Exchange Act were designed to open more fully the national securities markets to the free play of competition and to prevent unreasonable restraints on access to services and market information. Through the 1975 Amendments, Congress gave the SEC the authority to intervene in those situations where competition would not be sufficient to protect these interests. H.R. 1858's measured approach will further these goals by clarifying the proper use of market data and the rights of the various market participants to that data. H.R. 1858 accomplishes this by upholding the rights of retail investors and all market participants to access essential market data, while at the same time protecting the markets' necessary investments in market data technology from misappropriation.

Mr. OXLEY. Thank you, Ms. Dwyer.

That concludes the testimony and the Chair would recognize himself for 5 minutes for questions.

Let me begin with Mr. Ricketts because of all of the statements today, I thought yours was the most provocative. If I understood it correctly, since Ameritrade is essentially generating quotes, you believe you ought to be paid for that market information as opposed to the other way around. Did I get that right?

Mr. RICKETTS. You got that right, Mr. Chairman. If there is going to be a levy, if there is going to be a tax, there should be some refund that comes back to where those quotes originated from. They belong to the public. They don't belong to a purveyor; they don't belong to an exchange. Everybody is part of making the market system work, including the customers, the institutions and our customers, the individual investors that deliver the buy and sell orders to the marketplace.

Mr. OXLEY. Now, I think there would probably be some disagreement with that statement with some of your friends to the left. I wonder if anybody would care to comment on that, for example, Mr. Bernard.

Mr. BERNARD. I would be delighted. I guess it is worth noting that the world consists of investors and nobody else. That is where the money begins and ends. There is a list of companies, their money is investor money. Broker-dealers, they are intermediaries for investors. Same thing for mutual funds, you name it. So the question about who owns it is really not the issue.

The issue is that it cost us about \$550 million last year to run the New York Stock Exchange. We are pleased to give another \$180 million to you gentlemen, because we are a not-for-profit corporation; we are a tax paying corporation.

About \$110 million of that was revenue related to market data. Something under \$10 million of that was revenue related to the sort of fees that are being discussed here. With that money, we ran a market that is now at about 800 some-odd million trades a day. It does all of the things that you know it does, surveillance and those sorts of things. It is not about who owns the data. The question is that you have got to run the markets; you have to get that money from somewhere. It all comes from investors one way or the other.

Mr. OXLEY. Mr. Furbush, do you have any comments on that, on the provocative statement by our friend down here?

Mr. FURBUSH. My friend's provocative statement describes the current state of the world for him. He receives commissions from his customers, and he receives per-trade revenue from the market maker. The market makers are the institutes to whom he sends those trades.

In many cases, that data arises because the venues to which the trade goes are able to make money from the data selling them in the information national market we are talking about today.

Mr. OXLEY. Let me ask Ms. Dwyer, you are the largest online trader according to your testimony. What do you think about Mr. Rickett's idea? What do you think Charles Schwab would think about that?

Ms. DWYER. I think it is intriguing. I think that if we put our customers' interests first, then I think that we believe that each customer who puts in a bid or ask or transacts a trade essentially has an ownership interest in that. I don't think that is property interest that we are all interested in creating or paying for. We would much rather eliminate the tax on seeing your own quote.

Mr. OXLEY. Let me ask each of you. Ms. Nazareth, our first witness from the SEC, indicated that firms do not pass the cost of market data on to investors. Let me begin with Mr. Hogan and just ask you down the line. Do you go with that, that the cost is not passed on?

Mr. HOGAN. No, I don't. In fact, we do charge. We allow a client to have 100 free real-time quotes when they open an account. Each time they do a transaction with us, we give them 100 more free real-time quotes. To the extent the client uses up their quote bank, they can buy 500 more real-time quotes for \$19.95.

To the extent that clients want to receive from us streaming quotes, whenever they are logged on, they will get the stream of quotations that is out there in the marketplace. We charge them \$27.45 per month. This is in addition to any other commissions or service charges that we apply. It is not our understanding that we are unique. However, there is competitive pressure in the marketplace to try to deal with these sorts of fees in another way.

Mr. OXLEY. Mr. Ricketts, I can anticipate your answer.

Mr. RICKETTS. It is a little bit awkward or ridiculous to talk about how we pass on the fees. It is a cost of doing business that the customer has to pay. It doesn't matter which way we do it.

Mr. OXLEY. Mr. Bell.

Mr. BELL. For real-time information, our users basically have a choice. If they take real-time information, we pass on that charge to them.

Mr. OXLEY. Is that a direct dollar-for-dollar pass through?

Mr. BELL. In most cases, yes. Sometimes we bundle them together. If they have five or six different real-time exchanges they are accessing and then add some sort of small administrative charge. That is pretty much dollar for dollar.

Mr. OXLEY. Thank you.

Mr. FURBUSH. In Annette's defense, the direct charge that many investors pay is likely to be zero. But of course, my colleagues to my right, those are costs that are borne ultimately by investors. So, for example, if an online investor wants to see a real-time quote rather than a 15-minute delayed quote, that is costing a penny. And that investor either pays that directly or that penny is charged to the firm who is eating it.

Mr. OXLEY. He is getting something of value for that, obviously. A 15-minute difference in a stock quote is huge.

Mr. FURBUSH. It makes a world of difference.

Mr. OXLEY. Mr. Bernard.

Mr. BERNARD. Just like the other point, different firms have different business models as to whether they unbundle their costs and pass them on or pass them all on as a single commission.

Ms. DWYER. Our cost structure is the same as *DLJdirect*. We primarily absorb the cost to our customers. But there is another issue behind that. Because it costs us money to provide real-time quotes, we don't provide real-time quotes in many situations where a customer doesn't strictly need it, although they would be better served by having real-time data. It is what they don't get as a cost that affects investors directly.

Second, I would say that the way that the costs are now structured, they are uniquely discriminatory against online brokers in that a full commission broker is sitting at a desk with a terminal who pays a monthly fee. It doesn't matter whether he draws down 10,000 quotes or one. The fee is the same to the firm. When our customers access over the Internet, there is a cost associated with every quote. And therefore it is more expensive to deliver quotes to an online customer than to a customer who is dealing with a full-service broker. And that is a cost we bear as well.

Mr. OXLEY. Thank you. My time has expired. The gentleman from New York, Mr. Towns.

Mr. TOWNS. Thank you, Mr. Chairman. Let me again begin with you, Mr. Bernard. What are some of the problems that you see with H.R. 1858? Or are there so many you can't do it in 5 minutes?

Mr. BERNARD. There is really just a few technical issues. The basic thrust of the bill is fine. We concur with some of the ones that the NASD has mentioned. There is a troubling definition of government agency in the bill that we are fearful could be read to incorporate the self-regulatory organizations, the exchange, which of course is not a government agency although by statutory mandate it must collect consolidated market data. We are a little bit troubled by the idea that the SEC needs to start defining what is delayed and real-time. That has been a nonissue for the last 207 years. We are not sure it needs to continue. The market seems to do a fine job on that one.

There is a provision that has a different statute of limitations for market data as opposed to other databases, and we just don't see

the need for that. The fundamental property rights, whoever they are, are the same whether it is market data, sports scores or anything else. Then there is a technical issue of how well State remedies are preserved in concert with the Federal remedy.

We don't see any particular reason to extinguish the State's remedies as you bring about a Federal remedy. None of these go really to the heart of the wisdom of having a Federal misappropriation bill that recognizes the continuing jurisdiction of the SEC to deal with some of these issues that you have been dealing with today.

Mr. TOWNS. Thank you very much. You have been very helpful.

In your testimony, Ms. Dwyer, you state that the exchanges and the markets charge unfair and excessive fees for the market data. Are you saying that the SEC has failed in its regulatory role? What are you really saying here?

Ms. DWYER. I think that what I said was that we are concerned that the fees that are charged are not sufficiently related to the cost of producing the data and delivering it. We believe that the SEC needs to take a fresh look at the cost, cost justification, and concepts like cost recovery.

The real question is are the exchanges for profit businesses that have the ability, even though they are the only show in town, to charge whatever the market will bear for quotes; or is there a public utility character here that is invested with the interest of the American public that demands that there be some reasonable relationship to the cost of producing and delivering the data what is charged to investors.

So I am saying that we have petitioned the SEC to ask them to undertake just that analysis because we are concerned that while the costs in the brokerage industry have collapsed dramatically in the last several years—a primary example would be last month's announcement that Merrill Lynch is reducing its commissions to \$29.95—we have not seen a concomitant decrease in the price of market data.

Mr. TOWNS. Thank you very much. This is a question that the Chairman raised, but I am going to go at it in a different way. If market fees are lowered, would you pass the savings on to your customers? Let's go on down the line.

Mr. HOGAN. Absolutely.

Mr. RICKETTS. Very definitely.

Mr. BELL. Yes, sir.

Mr. TOWNS. You, Ms. Dwyer?

Ms. DWYER. Definitely, and we also provide them with better and more functional service.

Mr. TOWNS. Thank you. Let me phrase this one. Would any of you support Congress again fixing the prices charged for various data products?

Mr. RICKETTS. I wouldn't support Congress fixing the prices. I think I would support Congress creating an environment for competition and market forces to play out and let the market forces take care of the prices.

Mr. BERNARD. Congress looked at this issue 24 years ago and it said, let the self-regulatory organizations with their constituent boards take a first pass at trying to decide how to allocate the cost

of running the markets and what charges get made. The SEC oversees that through a regulatory scheme.

Our board consists of broker-dealers. It consists of lists of company chairmen. It consists of lists of people from the public sector. Half of the board is not from the securities industry. So there is a mechanism in place that tries to take into account all of the constituents' interest in how these costs should be allocated. That is a pretty good system; it actually works very well. I think if Congress stays where it is, which is to keep that club behind the door in case it needs it through the SEC, it will be fine.

Mr. TOWNS. Is that a no?

Mr. BERNARD. I guess that is a no. I spent 4 years in Russia. That is a definite no.

Mr. TOWNS. Thank you. I yield back.

Mr. OXLEY. The gentleman from California.

Mr. BILBRAY. Thank you, Mr. Chairman. Mr. Chairman, it has become obvious to me there is a distinct difference between the private sector and those of us in Washington—is that when you get a lower cost, you would lower the—how much—the price to the consumer and lower the fees that you charge. Here in Washington we would try to find a new program that we could provide with the extra revenue and justify maintaining the fees based on the expanded service.

Enough cheap shots for this morning.

Mr. Bernard, you were talking about—would you try to clarify for this member, talking about the issue of the rights of the performer who is being shot out of the cannon, which those of us in Congress relate to a lot. And then you relate to the fact of the sports scores.

How do we balance that whole issue, that the fact is that if somebody reports on the news and shows the film of somebody being shot out of the cannon that there is property value to that? But at the same time, we have sports scores being reported by CNN on cable, a service that is being charged for; but as far as I know, CNN or the TV stations are not paying the leagues for the right to be able to report those sports scores.

Mr. BERNARD. This really goes to the issue of real-time. One of the cases that actually made this bill a good idea looked at NBA sports scores. I tried to tell your counsel that market data had a more fundamental public interest than basketball scores, and I was roared down in the media. And having watched the Knicks and Spurs, I now agree that those are more important.

Mr. BILBRAY. You haven't seen him play basketball, both the ranking member and the Chairman.

Mr. OXLEY. I thought you were finished with cheap shots.

Mr. BILBRAY. I meant it as a compliment, Mr. Chairman.

Mr. BERNARD. When I was watching the Knicks making their valiant effort, every time I turned on the television the thing started with a whole bunch of stuff about how you couldn't videotape the presentation. I think that is the right analogy here. The minute this data is more than 15 minutes old as measured by our old ticker, it is out there. Ted Williams sports scores are out there and you can have either—

Mr. BILBRAY. It is the public domain.

Mr. BERNARD. I will never use the "public domain" word but we certainly don't charge for it. This bill made very clear, by the way, that we certainly can't rely on the statute to do that, but the issue is this. The market data is actionable within the first 15 minutes. If we are correct that revenue from market data is in our case about 10 percent or a little higher than that of the way we recover the costs we need, if that is a correct thing to do—which we think it is—then we have got to be able to charge for it. It is the actual periods like being in the middle of the basketball game and that ought to be protected.

Mr. BILBRAY. I would be very interested to see what CNN does with the real-time display that they show on the bottom of the screen.

Mr. BERNARD. They pay us for it, Congressman.

Mr. BILBRAY. What is the difference in the price between the real-time and 15 minutes? Would somebody give this poor layman some idea?

Mr. FURBUSH. Zero after 15 minutes.

Mr. BILBRAY. I will let my daughter know that. This information is really for a 12-year-old sitting in San Diego who does all of the investments for the family, I want you to know, for the last 2 years. Frankly, we don't argue with success, Mr. Chairman. If she can continue to make what she has been making for the family, she is going to continue for a long time.

Mr. HOGAN, what is the—you were talking about the new account and getting basically 100 hits for free. Is that that \$27 a month?

Mr. HOGAN. No. The way that we work it is a person with a new account, we give you 100 free quotes. If you do trades with us, thereafter for each trade that you do we give you another 100 free quotes. It is if you use up your real-time free quotes that you would have to go back and buy more access to them. We sell that access in two different kind of units. One is 500 more single units of real-time quotes for 19.95, which is the current price.

Mr. BILBRAY. I remember when we used to get our cars painted for that.

Mr. HOGAN. Or to the extent that you when you are logged on and you want to continuously and at all times see real-time data, because that goes by so fast and you would consume 100 units of that right away, we have a monthly fee which is currently \$27.45, which allows to you have at all times real-time quotes going by.

Mr. BILBRAY. Go back to the issue of the new account. What is the cost to a consumer at setting up a new account?

Mr. HOGAN. Nothing.

Mr. BILBRAY. Okay. Thank you.

Mr. OXLEY. The gentleman's time has expired. The gentlelady from California.

Mrs. CAPPS. Thank you. Thank you, Mr. Chairman. And I appreciate the testimony that each of you have given and also the interchange of information so far.

I want to ask Ms. Dwyer to describe a little bit about the statement that you made that current fees discriminate against your customers and others' customers at the table as well and that you have asked the SEC to evaluate the way that the current fees are established and modernize—you didn't use that word, but I am

kind of reading that that is what you are intending with the advances in technology and your ability.

And if you have ideas for them—I am sure that you are asking for this with some suggestions in mind. Others of you might also have that. I would then like to get a response from Mr. Furbush and Mr. Bernard.

Ms. DWYER. The point that I was making was that online investors use quotes differently than investors have in the past. So as we have seen this explosion in online trading, we find that a customer who may have been reluctant to call his broker five times a day and ask how something is doing before he makes up his mind to do a trade. He or she will now look, because he can now access quotes much more frequently.

In fact, when Schwab did business primarily over the telephone, our proxy was 10 quotes per actual trade usage on average. We are now seeing—I quoted some numbers last night and I checked them this morning—we are now seeing 75 quote looks per trade on average. People are looking because they can. The more they have, the more they want. Their expectation is very high to look at data, to be able to really be involved and look at what is going on.

A full-commission broker, his firm is paying for terminals. They pay a flat monthly fee. It is on a sliding scale. The more terminals they have, the lower the fee, I believe. They can access quotes all day without increasing that fee. Yet our customers as they increase their usage are racking up those costs. That is the discrimination that I was talking about that is an issue. As we are seeing, people are moving online in dramatically larger and larger numbers. It is a facility that they enjoy, they want, and they use tremendously.

So what we have asked the SEC to do in our petition filed yesterday, among other things, in a cost justification in looking at the real finances behind all of this, is to look at how the fees create a more transparent and open process or how fee structures are created, to set some standards to ensure that you don't have needless consequences, that the fee structures adequately address and are scalable as businesses change and grow. We have asked public representation on the CTA board which sets these fees. We have asked for essentially a more open, free, and understandable process.

Mrs. CAPPS. So you are not asking for specifics as to what the fees should be. You are just setting the parameters and asking that certain people be on board?

Ms. DWYER. No. We think if there is the right input, the statute gives the SEC all of the authority they need to really fulfill this function. If the forces of competition and supply and demand are allowed to work here and there is good input from all parties, we think there is no rate making necessary.

Mrs. CAPPS. Do the others of you agree with that analysis?

Mr. HOGAN. Absolutely.

Mrs. CAPPS. Those goals are your goals as well? Is there a response?

Mr. BERNARD. First of all, Schwab is a member firm in the New York Stock Exchange. So is Merrill Lynch. Carrie just described two business models. The Stock Exchange and the NASD are trying not to discriminate against one type of member against an-

other. We are neither permitted to do that by statute nor why would we want to. They both own us.

We have tried to respond. There are different business models as to how to do the right thing. Terminal charge on an hour versus a penny per quote or now one quarter of penny per quote for a Schwab customer. The way we have done it is first of all we have drastically reduced the fees, as I mentioned before, so that is of course a start.

Second, we have an all-you-can-eat manual of a dollar a month now in our pending proposal. So no matter how many quotes a particular customer of Schwab takes, Schwab will pay no more than a dollar per month in respect to that customer. Moreover, we have linked the two so that whichever one is lower for Schwab. If they have a low use customer and if they stay below a buck, they pay that amount. If it is a high use customer, they are capped at a buck.

In addition, looking at firms like Schwab that has both kinds, although they are phasing out, we have basically put a basic cap on the maximum amount that any broker-dealer can pay in any given month, which is \$500,000. So Schwab, if this is passed, would be capped at \$6 million a year for the market data fees that relate to the New York Stock Exchange traded securities.

Ms. DWYER. Let me just add that those fees are not actually in effect yet. They are proposed. They represent a good start, but our issue is with the process of creating the structure.

Mr. BERNARD. If I might add, Schwab is proposing this joint venture. The markets have public representatives. I just want to make a point about that. That is what it is, a joint venture. The real decisionmaking is not made at the joint venture. It is responding to the self-regulatory organizations. Each of them by statute have to have constituent representation including public representation on the boards. So I really don't understand that particular argument.

Mr. OXLEY. The gentlelady's time has expired. The gentleman from Illinois, Mr. Shimkus.

Mr. SHIMKUS. Thank you, Mr. Chairman. The first comment, I just want to throw this out to the panel. I apologize if you may have addressed this before, but I have two simultaneous hearings going on. Levar Burton is downstairs, so you Star Trek fans can appreciate me wanting to be there, rather than up here immediately.

My interest in this also revolves around the process we are going to go through today and tomorrow which is financial modernization. I always like to look at State laws, federalism, and so the question is, how does the industry view the federalism argument with respect to this bill? Is there a conflict?

Mr. FURBUSH. Let me presume that there would be agreement among us, as on most issues with this panel, that the data use is national and indeed international and that this would be an appropriate area for Federal effort.

Mr. BERNARD. I agree with that comment. I would add, though, that there is no reason to preempt State remedies in this area. What we are doing here in this particular bill is Federalizing what is an existing common law remedy in the State. There is no reason

why the two couldn't coincide. Of course, conflicts would have to yield to the Federal law.

Mr. SHIMKUS. Anyone else want to add? Okay, thank you. I believe that delayed data simply is by being delayed is historical fact. And so why is it important in this legislation that it doesn't address delayed data?

Mr. BERNARD. Well, I think the whole point is to not give these misappropriation rights a pie in regard to delayed data, the net effect of which is going to be that the price is zero. I don't know that there is any controversy on that here at all.

Mr. SHIMKUS. Just moving right along. Ms. Dwyer, my last question is you note that in H.R. 354, the legislation recently considered by the Judiciary Committee would grant exchanges, new rights and control over market data and chill innovative uses of that data. Could you just elaborate on that. What sort of innovations are you concerned about and how is this—how could this be dangerous to investors?

Ms. DWYER. Well, we were concerned that the Coble bill grants what we consider to be new and very extensive property rights in the exchanges with civil and even criminal remedies for an ill-defined misappropriation. The language is very broad in the Coble bill with respect to what misappropriation is. It is literally any extract or use. The bill is not limited to real-time data.

So, for instance, we are concerned that if someone wanted to construct an index of market prices going back 10 years, one would have to approach the owner of that data to ask for permission to do that and pay a licensing fee. That is clearly something that we think would chill the development of products, services, and certainly restrict the free flow of factual information that investors need. Those are our continuing concerns with that.

Mr. SHIMKUS. So although the data was published and could be compiled, the individual would still have to go back to the providers of the original data?

Ms. DWYER. We are concerned that the misappropriation remedies were so broad that there could be action against that kind of use.

Mr. SHIMKUS. Thank you. Mr. Chairman, I yield back.

Mr. OXLEY. The gentleman yields back. The gentleman from Wisconsin.

Mr. BARRETT. Thank you, Mr. Chairman. My knowledge in this area is virtually nil, so I am going to try to get a little tutorial here so I have a better understanding when the hearing is done as to exactly what we are doing.

Are we talking about 15 minutes? Is that what we are talking about here? So the value of this property is for a 15-minute period? Anything thereafter is no value—I don't want to say no value, but that is not what is at issue here. Is that right?

Mr. BERNARD. The point is only actionable, market data prices change very quickly, so it becomes historical very quickly.

Ms. DWYER. It might be within the 15- to 30-second range.

Mr. BARRETT. So if I go home and I turn on my computer and get the prices and there are 15 minute or 20 minute delays, we are not talking about that here, right? Again, just bear with me here so that I understand what we are doing. So if it is a 15-minute pe-

riod, it is the New York Stock Exchange, you are supplying it to Charles Schwab, they are paying you for this service. Is that right?

Mr. BERNARD. In short, yes.

Mr. BARRETT. Again, bear with me. The fees that are generated, those are used to cover the costs of the expenses of the stock exchange; is that correct?

Mr. BERNARD. Precisely. They contribute about 10 or 12 percent in the case of the New York Stock Exchange.

Mr. BARRETT. So all, not just Charles Schwab, but all fees generated in the sale—is it called real-time data? That is used to pay the cost of the New York Stock Exchange?

Mr. BERNARD. Yes.

Mr. BARRETT. You would concur with that?

Ms. DWYER. I believe that is what happens.

Mr. BARRETT. Does the SEC have any say over what you charge for that data?

Mr. BERNARD. They have an oversight obligation. Their standard is that the charges have to be fair and reasonable, and they also cannot be unreasonably discriminatory.

Mr. BARRETT. The problem that we are dealing with here or the potential problem is someone else who can come in and just lift that data from the stock exchange; is that correct? Is that happening now?

Mr. BERNARD. As Mr. Furbush testified earlier, the problem is that we have traditionally tied market data dissemination up by contracts. That gets in the way of the broadest, widest dissemination of market data. So that if you can instead rely on a certain national misappropriation theory, it gives you more freedom to disseminate out to investors without trying to wrap them into a contractual framework.

Mr. BARRETT. Okay. All right. I guess this is where I am starting to get hazy then. What is the problem then? Who can come in and get this data? Who would be the person in the company—

Mr. FURBUSH. The problem would be if a market has a contract and is selling the data in real-time which is valuable to another entity—we have many contracts, many entities who buy these data—it could be that another entity, a data pirate that we don't know, is accessing those data and misappropriating it, using it for fun or profit. That is data that we didn't sell to them. This would give us right of tort explicitly against those who misappropriate outside of the contractual arrangement and establishes the right under contract. It sort of reaffirms the right under contract to those with whom we do have contractual arrangements. Does that clarify it?

Mr. BARRETT. That is helpful. Mr. Ricketts, you made a statement that the Chairman said was provocative. I guess I am a little younger. I think that maybe Tom Cruise and Nicole Kidman we would find more provocative. Everybody makes their own decision.

Are you being realistic or honest—

Mr. RICKETTS. I am being very realistic, very candid. The evolution of the markets with respect to the technology is changing rapidly. We don't need physical locations for exchanges. We need service with communications and we need to have systems that are going to protect the data. We need to lower our cost to increase the

depth and breadth and the liquidity of the marketplace. That is being impeded by the fact that we don't have free competition.

The thing that I am afraid of with respect to this particular bill is that inadvertently Congress creates a monopoly, a situation where one purveyor can charge any amount that they want and can use those dollars to cover other costs that are not related to disseminating the information which my customer owns a part of to begin with.

Mr. BARRETT. So how would you change this bill?

Mr. RICKETTS. I would change this bill to provoke competition among purveyors of quotes?

Mr. OXLEY. The gentleman's time has expired. The gentleman from New York, Mr. Engel.

Mr. ENGEL. Thank you, Mr. Chairman. I apologize for being late. I have been juggling hearings all morning. The telecom subcommittee was just a hearing to which I was at.

Mr. Bell, I have visited your office in New York and met Mike Bloomberg. It is clear that Bloomberg is a leader in the information age and one of the best financial databases to be found anywhere. This committee, however, in earlier hearings has heard impassioned pleas from other producers of databases that brought antipiracy legislation such as the ones passed by the Judiciary Committee is essential to the survival of the database industry. That is what they testified. What do you know that they do not, because obviously you have a different point of view?

Mr. BELL. That is a good question. I guess the first point that I would make is I don't know that the industry is not surviving. I would say that it is actually thriving. Organizations like Bloomberg and financial services businesses, I guess different services on the Internet like Yahoo or whatever, they seem to be thriving. So I would say in the present situation there is the possibility for forthright thriving.

Bloomberg, I guess, is looking for legislation which would allow for some protection to fill a loophole which would really apply to just pure piracy of databases. We feel that the Commerce Committee bill does that. I guess if I were to characterize the Judiciary Committee bill, I would say that it tends to be more thinking about existing databases and looking a bit more in the past, whereas I think the Commerce Committee legislation is certainly more looking toward the future and would share the fact that we could innovate and add value to databases in the future.

Mr. ENGEL. That would be your estimation as why you find the Judiciary Committee objectionable?

Mr. BELL. That is correct.

Mr. ENGEL. Thank you. H.R. 1858 protects the rights to databases at the same time ensuring that accurate information on real-time market data is available to consumers and investors. I am told in the testimony some of you have expressed concerns over potential manipulation of this type of data.

I am wondering if anyone on the panel would care to comment on recommendations that you would make to ensure that your concerns are addressed. Does anyone care to comment on that?

Mr. RICKETTS. Mr. Congressman, I think that we need to maintain the authority of the regulators, the Securities and Exchange

Commission, in their oversight to make sure that we have free flow of information, that we have good sound markets, and that there isn't any piracy or theft.

Mr. ENGEL. Anybody else?

Mr. FURBUSH. In my testimony, I referred to the value of the data deriving from its integrity, which doesn't happen by magic. It happens because of actual people who go out and go to firms and meet with folks and make sure that the data is not being manipulated and essentially the entirety of our regulation program goes into ensuring the reliability of the information. And so I am not sure I am answering your question, but my sense is that the value of the information is related to the extent to which we are comfortable that the information has not been manipulated.

Mr. ENGEL. Okay. Thank you. I am told that my fellow New Yorker, Mr. Towns, asked a question similar to this, but I was wondering if some of you could enlighten me as to how as an industry, how do you determine what a fair price is for market data?

Mr. BERNARD. If I might start from the New York Stock Exchange, our process is a necessity of running the stock Exchange and covering its expenses. Market data fees are one of several ways in which we collect revenue in order to recover our expenses. Historically for us it is run about 10 percent of our revenue. That is done by a constituent board consisting of not only the securities industry, but people representing investors and listed companies in the public in general.

Mr. OXLEY. The gentleman's time has expired. The gentleman from Massachusetts, Mr. Markey.

Mr. MARKEY. Thank you, Mr. Chairman. I know I am late. I was with the ranking member of the hearing of the Corporation for Public Broadcasting, the public broadcasting system at National Public Radio.

You know, the discussion that we are having really emanates from these different perspectives which are created by the historical bifurcation of jurisdictions. The Judiciary Committee looks at issues through the copyright perspective, and they are very strongly protective of that perspective.

We look at all of these issues, understandably, from the perspective of the telecommunications revolution, this ever-expanding number of technologies that are created and the entrepreneurial activity that we try to generate as a result of that revolution.

Now, at a certain point in time there is a convergence. And the balance that we are going to have to strike here is one that pays due respect to each one of those perspectives while trying to ensure that we continue to move in a direction that ensures this rapid expansion of innovation in the technology sector. So I think this has been a very important hearing and I am told that almost all of the relevant issues have already been dealt with.

I thank you, Mr. Chairman, for working on this issue because I think the committee is going to have to work something out here ultimately with the Judiciary Committee. I can promise you that it is toward the goal ultimately of being respectful of all of the participants here at the table. They all have to be given their due and I thank you, Mr. Chairman.

Mr. OXLEY. I thank the gentleman from Massachusetts for his contribution and his considered good work on this effort. We thank all of the members of our panel for their most enlightening testimony and very incisive answers to some good questions. With that the subcommittee stands adjourned.

[Whereupon, at 11:56 a.m., the subcommittee was adjourned.]

ISBN 0-16-058778-6



